

# NATION'S BUSINESS

SEPTEMBER • 1941

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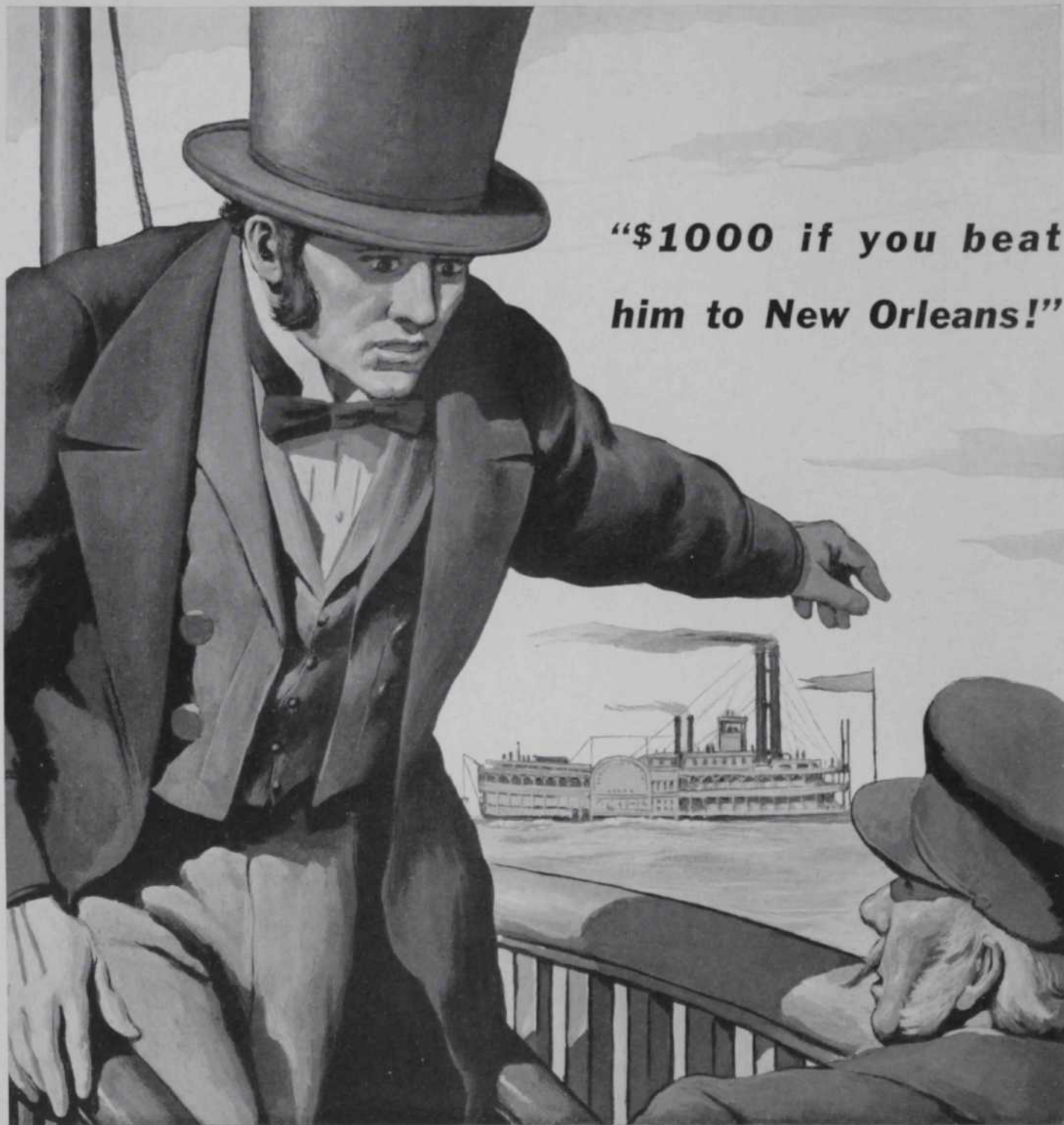
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Because Ethyl's anti-knock fluids are an important factor in the development of both fuels and engines, our research laboratories in Detroit and San Bernardino cooperate with both automotive and

petroleum technologists. We function as a “clearing house” for technical information, help to coordinate many individual research efforts and contribute the results of many of our own tests and experiments with fuels and engines.

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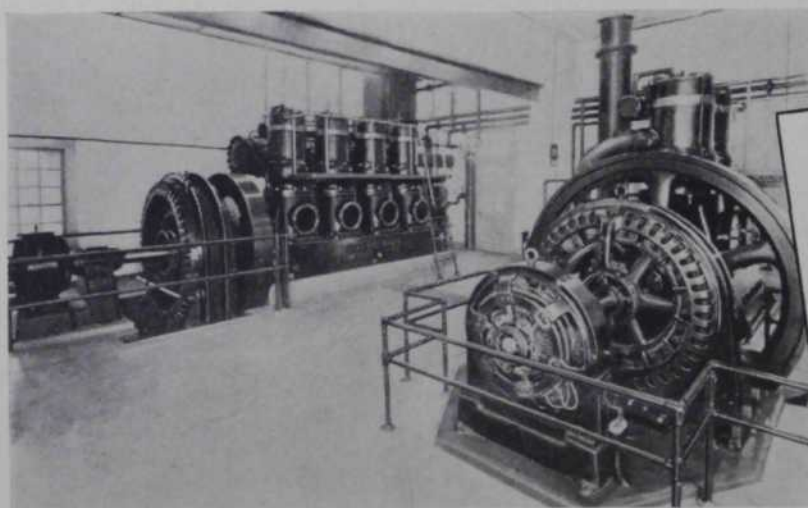
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It will continue to be this Company's No. 1 job to supply all possible power for food and for defense—for the greater strength and security of the United States of America.

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# INTERNATIONAL HARVESTER



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**NATION'S BUSINESS • CHAMBER OF COMMERCE OF THE U. S.**

VOLUME 29

**Merle Thorpe, Editor & Publisher**

NUMBER of

Managing Editor, RAYMOND C. WILLOUGHBY; Business Manager, LAWRENCE F. HURLEY; Director of Advertising, ORSON ANGELL.

GENERAL OFFICE—Washington, U. S. Chamber Building. BRANCH OFFICES—*New York*, Graybar Bldg. *San Francisco*, 333 Pine Street; *Dallas*, 1101 Commerce St.; *Chicago*, First National Bank Building *Atlanta*, Chamber of Commerce Building; *Canadian representative*, 530 Board of Trade Building, Montreal, Quebec. As the official magazine of the Chamber of Commerce of the United States this publication carries authoritative notices and articles in regard to the activities of the Chamber; in all other respects the Chamber cannot be responsible for the contents thereof or for the opinions of writers.



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*Would you Believe it?*

Compacts and cigarettes; lipsticks and letters; powder puffs and pins; perfumes and pills—such unusual companions travel in the secret compartments of milady's handbag! But even more strange, is the conglomeration found in modern freight trains . . . cabbage and coal; eggs and elevators; lumber and livestock; silk, spices, sewing machines and structural steel—everything from "soup to nuts"!

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## THROUGH THE Editor's Specs

### After the ball—what?

IF A GROUP of men had been trying to change our American system over to Socialism, and if, beyond a certain point, public opinion restrained them, and if foreign affairs reached a stage when they could bring these plans forward again under the guise of national security, what form would they then take?

Turn now from hypothesis and contemplate this reality. All over the country new plants for war production are being opened, most of them government financed. It is said that 784 of them have been opened in less than three months. What will become of these enterprises when the war is over? "Will the government plants be used as 'yardsticks' to force private industry to measure up to reformers' ideas of management?" asks Walter D. Fuller, president of the Curtis Publishing Co. "Will they be used to beat down values so that private plants can be bought in at low figures?"

This is the shape of the ghost that stalks at every business conference, the object of fear and misgiving, the destroyer of national unity.

### What, no seraphic bosses?

IS YOUR secretary seraphic—in bargain counter words, has she sprouted any wings?

The members of Seraphic Secretaries of America, Inc., would not insist on a literal definition of their club name, although one of their profession who does her job perfectly would come about as near qualifying as any other aspirant for a seraph's wings.

Miss Frances Schooner, secretary to Samuel F. Pryor, Pan-American Airways official, and president of Seraphic Secretaries, took time lately to give a reporter her idea of the four worst "headaches" secretaries endure. Telephone interruption is the worst, she said. Then come in order job seekers, insurance and bond salesmen and railroad and airplane reservations.

We suspect Miss Schooner was being diplomatic. We would wager that if the average secretary were polled

privately she would say No. 1 headache is her boss. But no secretary who said that for publication would be seraphic.

### Why play by Hitler's rules?

WITH the primary thesis of Douglas Miller's book, "You Can't Do Business With Hitler," most Americans probably will agree. He has made a strong case against Hitlerian duplicity in commercial relations that seems pretty conclusive.

But we dissent from Miller's secondary conclusion that, whether the Nazis win, lose or draw, this country must ape their economic system. The world in any event will become one of regulated economic life, he says.

This arid defeatist philosophy matches that heard everywhere these days in political and military as well as economic thinking. Faith that our way of doing business will win in competition with any other seems largely to have shriveled up. Because Germany regiments its people like robots, it is argued that this country must do likewise to counter their folly. The German army won surprising victories with its Luftwaffe and its panzer divisions; ergo, we must pin all our faith on building more warplanes and tanks like the Germans have.

That is not the strategy by which this nation has outdistanced its competitors. We grew great by being different. Our method now should be to think of something better than the Nazis have. Imitators seldom if ever surpass their originals. Even if we could, we must remember that like methods tend to yield like results. Do we want Nazi results?

### Balm in Gilead

NATIONAL defense sacrifices will have their compensations if war economies force us to dispense during the emergency with

Convention dinners with tin horns and dunce hats for all the diners;

Entertainment of customers from Pewterville who want to be taken to the newest burlesque;

Surveys to discover whether or not consumers (with a little prompting) pre-



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fer our goods to our competitors', the results to be released if the showing is good enough;

Contributions toward a folk theater for the refugees from Szechwan.

### All out for solvency

WE SALUTE President Henry M. Wriston of Brown University and his eminent associates on the Citizens Emergency Committee on Non-Defense Expenditures. In a servile age they still have the courage to stand up and fight for national solvency.

Dr. Wriston makes a good beginning in reminding Americans that the present Congress has appropriated \$33,000,000,000, or \$1,100 a family for the whole nation. The non-defense portion alone exceeds last year by \$90,000,000.

It may be illuminating to extend these figures just a bit further than Dr. Wriston has done. The Department of Commerce has estimated individual incomes for this year at \$85,000,000,000, or a family average just under \$2,500. If you want to know what your part of that appropriation of \$1,100 per family—mostly a debt—amounts to, here's a formula for determining it. Your share in the outlay bears the same ratio to \$1,100 as your annual income is to the average of about \$2,500. Example: If your earnings are \$7,500, that is three times the average income, which means that Congress has drawn a draft of \$3,300 on you, in addition to the public debt existing at the beginning of this year. If your income is \$1,250, the draft is for \$550.

### Policing investors

LAST TIME we were in New York we heard this experience of a financial reporter in Wall Street. It could never have happened in our America of any previous generation.

This reporter received a call one day not long ago from a curb broker through whom he had bought a small block of stock.

"You are wanted in my office by two gentlemen from the S.E.C.," the broker told him. "They say if you don't come down here you'll have to meet them at their office."

Expecting to get a story, the writer rushed downtown, only to find that the government agents wanted to know who had given him a tip to buy the stock. His answer was "None of your business," or words of that tenor.

The S.E.C. men put on stern visages. They suspected a pool being manipulated in the stock. They cajoled. They badgered. Failing to make him loosen up, one of the agents, in deep official tone, said to the other: "Shall we take him to headquarters?"



Our reporter friend was mildly amused at his inquisition until it came to him that this farce would be a serious matter to an uninformed citizen who could be bluffed by the name of the Government called in vain. Then he did some lecturing himself before walking out.

The joker in the affair, as he related it, was that "My purchase was for 500 shares at five cents a share. I've become a wolf of frenzied finance at just \$25."

### Security for hen roosts

REASSURED on the state of the nation's foreign, financial and military affairs, the House of Representatives turned its attention on July 21 to the more concrete issue of interstate chicken stealing.

Representative Wolcott of Michigan wrested with the question: Are pigs and horses "cattle"?

Representative Stefan of Nebraska said that chicken stealing is one of the worst conditions in his state, and must be stopped.

Representative Michener of Michigan asked why the F.B.I. should have to run down chicken thieves and dog snatchers as well as saboteurs and coiners.

The bill to extend federal jurisdiction to animal rustling was engrossed, read a third time and passed. What bill enlarging the federal prerogatives is ever defeated any more?

### "This cockeyed world"

"AN OPTIMIST is a man who thinks the future is uncertain."—Raymond Rubicam, advertising executive.

"ENGLAND is through with the responsibility of solving the problems of Europe, which she has done for the past 300 years. We have had enough of it. It is time we passed on the 'baby' to the Americans."—Col. Josiah C. Wedgwood, M.P., before British Empire Chamber of Commerce in the United States.

"WE WILL have a standing army of 3,000,000 or 4,000,000 men all through the lives of our children. Perhaps during the next 100 years the world will become civilized."—Newbold Morris, president, New York City Council.

A BROOKLYN factory president sentenced to serve five months in prison for kiting checks was released by a U. S. District judge on the plea that his imprisonment would tie up defense orders.

THE U. S. Government has bought 42,000 acres of farm land in Bates County, Mo. It will be used to provide



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\*Foremost Boiler Inspection

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Not only is this nation-covering force skilled in spotting trouble, but able, under the guidance of a highly experienced engineering staff, to point out the remedy and head off disaster *before* it can happen.

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and uninterrupted operation of your power equipment—for coming to your aid *quickly* in the event of emergency.

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Writes more power-plant insurance than any *FIVE* other companies in this field; and shop-inspects more than 90% of the nation's industrial-power boilers during their construction.



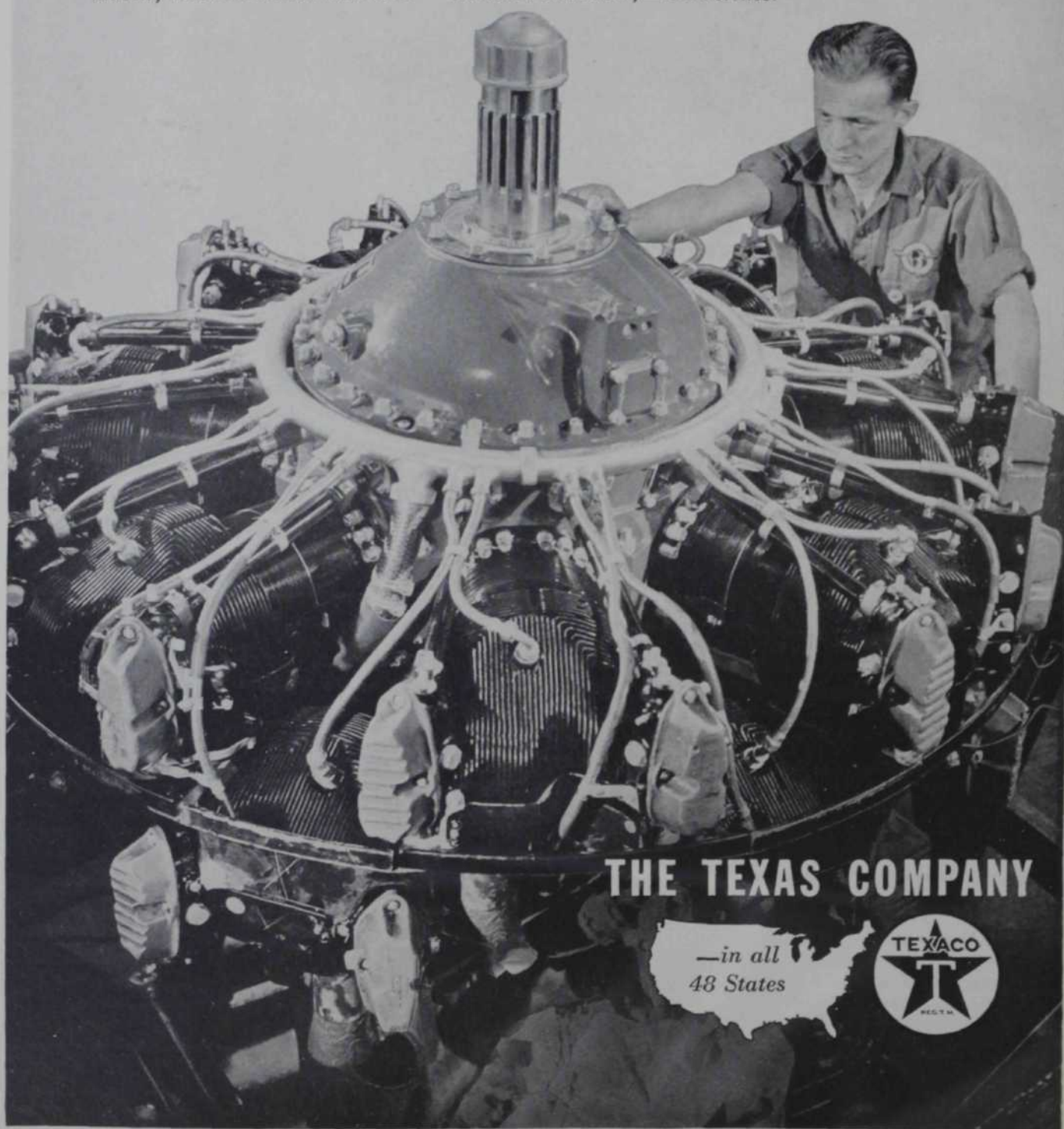
# ***CYCLONES*** **COMING!**

MAN made and mighty in the air. Assembled from 8,500 separate parts, requiring over 80,000 machine operations and 50,000 inspections, this giant engine is indeed an instrument of precision and infinite skill in production.

Today, as never before, the aviation industry relies on efficient lubricants

—for thousands of critical machine tool operations. And afterwards, on both lubricants and fuels, for millions of air miles.

With more than 2,300 wholesale supply points throughout the United States and its specialized engineering service, Texaco meets the demands of all industry—and defense.



**THE TEXAS COMPANY**

—in all  
48 States





homes for farmers ousted to make way for defense projects.

A BOLIVIAN legislator on a good will tour of the United States warns that the Good Neighbor spirit in his country will cool decidedly if Bolivia doesn't obtain the loan it is seeking from our government.

MIKE QUIN, West Coast Communist writer who coined the slogan, "The Yanks Aren't Coming," keeps in tune with the times since the Russian campaign, by changing his slogan to the war cry, "The Yanks Aren't Coming Too Late."

"IT IS one of the profound ironies of our defense effort that its total effect may well be to obliterate the smaller enterprises from the American scene."—Peter R. Nehemkis, special O.P.M. assistant.

THE ILLINOIS Small Business Men's Association asserts that two-thirds of the state's small industrial plants will be forced out of business soon unless they can either obtain armament contracts or the materials for normal civilian production.

"WHEN THIS war is over . . . we must have international economic planning. The Labor movement reaffirms its conviction that there is no road to enduring peace save by the growing acceptance of Socialist principles. No peace, therefore, which does not aim at a Socialist reconstruction of international society can be accepted by the Labor Party as adequate to the sacrifices involved in the defeat of Nazi and Fascist aggression."—From a statement by the British Labor Party.

### Tribute to "go-getters"

REPORTS coming from a number of reputable sources reveal that, while this country is straining to aid Britain, the British are methodically cutting the ground from under our foreign traders in South America.

An Ohio paint company, unable by reason of the war to supply aluminum paint to its customers in Venezuela, learned that a London company was taking over its business and filling orders.

An American manufacturer of hard rubber goods has been compelled to curtail his export business because of armament monopolization of raw materials. But he received a form letter from an English supplier offering to sell finished competitive goods in this country.

While the United States is giving away steel to Britain under the Lend-Lease Act, our alert cousins over

there, it is said, are continuing to export steel to South America and underselling American companies out after the same business.

Somehow, the signals seem to have been mixed. We thought it was "all out for democracy" but the British go on playing the "business as usual" formation.

### Blondes to the fore

THERE'S something about war fever that's strangely like religious fervor. When a revival preacher of the more primitive persuasion works a backwoods community queer complexes often result from his labors in the vineyard. Men sometimes submit themselves to the deadly caress of a rattlesnake's fangs. Women may leave their families to follow an itinerant preacher to glory. Occasionally they have been known to wear sack cloth, cut off their hair and otherwise humble themselves before the throne of grace on earth.

An incident in the current news is reminiscent of this peculiar psychology at work in another direction. Some imaginative Washington journalist published a dispatch saying that the Army was in need of blonde human hair for use in the manufacture of certain precision instruments. At once the War Department was besieged by phone calls and letters from blonde women offering to contribute their tresses for their country. In response the war office had to inform these patriots that the military situation does not demand such a sacrifice. In brief, the women were advised to keep their hair till they could see the whites of the enemies' eyes.

### Too many soul-savers

THIS outburst from an Oklahoma subscriber is passed on without comment:

Can't something be done about all these Good Neighbor government missions to South America? I see by the papers that a famous American violinist returning home from a personal tour of Latin-America says the people down there resent all these artificial attempts to establish cultural relations. They feel they are being patronized. John Erskine, the author, comes back from a tour with the same sort of report. He says our neighbors on the south are fed up with official good willers, that American firms trading in those countries can do more for genuine amity than all the political greeters.

An old missionary once told me what a shock it gave him to discover as a young man that the heathen don't want to be saved and generally don't even know they are heathen. Maybe our South American brothers are like that. Who knows? We may be the heathen ourselves.

### Esthetes in uniform

CERTAIN War Department statisticians affirm that the favorite litera-



We all like to "look in a window"—and the Standard Brands Tender Leaf Tea package capitalizes on this human trait . . . It does more—it immediately shows the prospective purchaser that here is something new and better—a tea packed in specially prepared filter paper that is tasteless, odorless and insoluble in boiling water.

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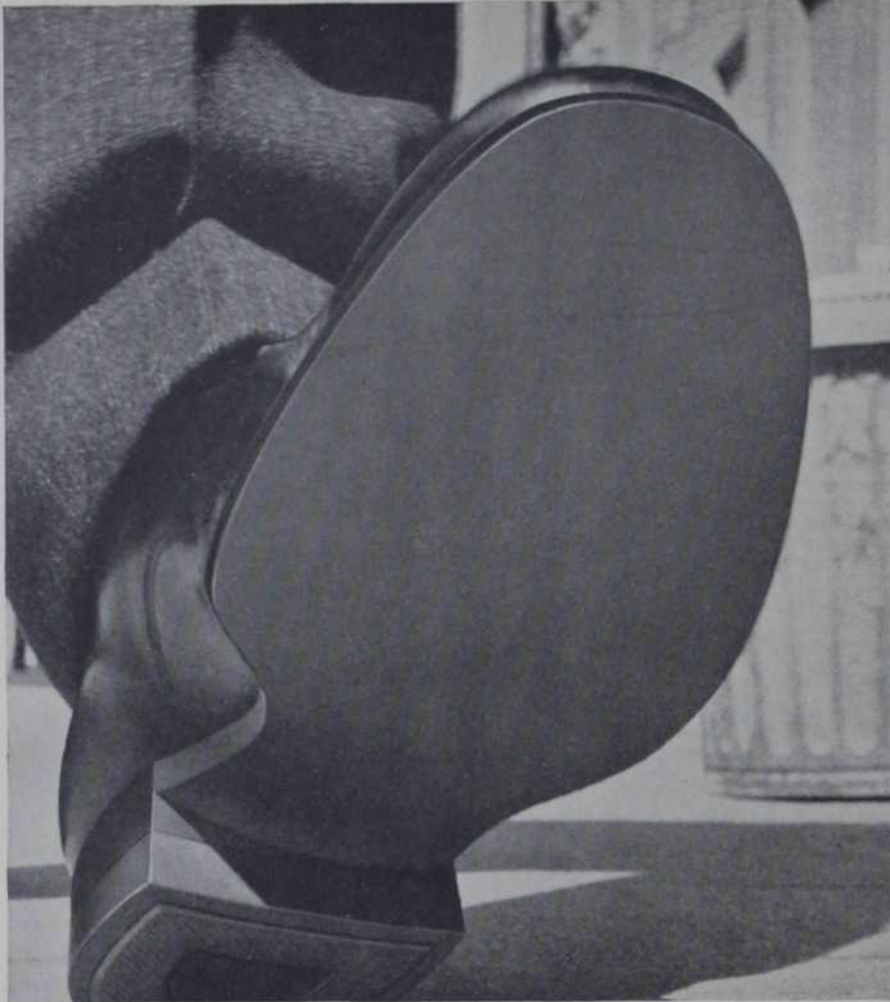
For advice on any packaging problem  
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MACHINERY COMPANY**

Springfield, Massachusetts

New York Chicago Cleveland Los Angeles Toronto





## PUT YOUR FOOT DOWN

Priorities—a scarcity of new equipment—a shortage of skilled labor—are all properly a part of our "Defense" burden.

Credit losses are not just a part of the "Defense" burden. They're an every-day problem—365 days a year. Manufacturers, Converters and Jobbers are no more immune than the local grocer. And yet, business will experience several hundred million dollars in credit losses this year alone.

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UNITED STATES AND CANADA

ture of soldiers in the camps is poetry.

We've been trying to visualize the boys in khaki lined up hungrily before a librarian's desk asking for volumes of Browning, Keats and Edna St. Vincent Millay. Perhaps an occasional lowbrow will demand Eddie Guest, but give him time and he may graduate to the sheer delights of blank verse.

Publishers on the lookout for clues to popular reading tastes may take heed. They might also consider the words of a soldier interviewed recently on a national radio program. The three great needs of the boys in camp, he said, are (1) razor blades, (2) home town papers, (3) comic picture pulps.

### Heroes made to order

INDUSTRIAL psychology is an established profession, but the military psychologist is something new under the sun. Out of Naziland comes a report that 200 military psychologists are assigned to the German armies. They have been given the considerable task of stimulating in Teuton warriors confidence in their leaders, hero worship, faith in the Nazi ideology and other forms of morale building.

If the British high command wants to checkmate this move they don't need to start training psychologists. Napoleon, who was the master psychologist of his age, indicated the objective and the method. A successful commander appeals to his men's imagination, he said.

*A soldier does not face death in order to earn a few pence a day, or to win some paltry order of merit. None but the man who touches his heart can stir his enthusiasm.*

### Education of a reporter

IT MUST be news when a cattle car is loaded with coal, a North Carolina newspaper photographer told himself, and snapped a picture of the car as "evidence of the national defense pressure on the railroads." But it was only a coke car loaded with coke, as the editorial office soon learned through a stream of phone messages from readers following publication of the picture.

Business too often is subject to errors and misrepresentation in the press. But seldom are amends made so nobly as did this newspaper. Its original photo and caption occupied 15 column inches of space; the correction 20 inches.

### Sane on local issues only

REPRESENTATIVE Ditter of Pennsylvania calls attention to a report of the Census Bureau showing that



during 1938 and 1939 voters rejected 64 per cent of all local bond issues submitted to them for ratification. To Mr. Ditter this is proof that, when given an opportunity to express themselves clearly, the people stand for an end to public extravagance.

It would be comforting to believe that the Congressman is right in his conclusion, but we are not convinced. True, in local affairs the people have begun to see that every "worthy cause" has its price and every community a limit to its great-hearted liberalism with the common funds. But a large proportion still believe implicitly that any boon received from Washington is velvet to be paid for by Big Business and the millionaires. The day of disillusionment will come but only, we fear, by the same process of education through which a burnt child is said to avoid the fire.

### Discovery

RESULTS of research in the Consumer Division, Office of Price Administration and Civilian Supply are released to the nation in a booklet containing advice to motorists on "Your Car and National Defense." Among the more pointed counsel are these items:

1. Keep your car housed in a garage.
2. Grease your car every 1,000 miles.
3. Wax your car four times a year.
4. Keep your tires inflated.

Where have the automobile men been all these years? Why haven't we been told these vital facts before?

### Political realist

FRANK admission of a Government official with positive ideas about money power:

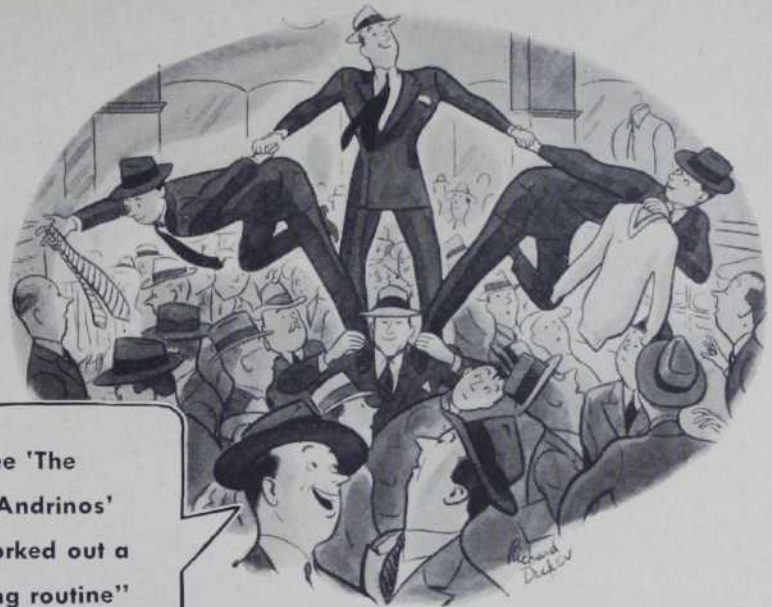
The record indicates that the side which spends the money usually wins the election.—Prof. Donald D. Blaisdell, Department of Agriculture economist, in a monograph, "Economic Power and Political Pressures," published by the T.N.E.C.

### Could it be politics?

THE PRESIDENT of Harding College says that four young men can be sent through college for the cost of one C.C.C. camp enrollee.

An authority on forestry writing in NATION'S BUSINESS for May, 1940, declared that a good state forestry department such as that maintained by Connecticut can show more practical results in forest conservation for \$1 than the C.C.C. for \$20.

Question: If the C.C.C. is a flop both in education and forestry, and there is now, in large sections of the country, a positive shortage of labor on farms and in certain industries, why is this "emergency" agency continued?



### Look what Glass can do

to draw trade to a retail store! When a store interior has the personality that glass can give it . . . the smartness of mirrors, glass blocks, plate glass and structural glass . . . it just seems more appealing to the buying public. You don't need to spend a lot of money to decorate with glass. Even a small expenditure often works wonders with your sales volume. And the glamor of glass is equally effective in drawing profitable busi-

ness to theatres, restaurants, hotels . . . to any establishment which depends on the public for success.

You can use glass to wake up an interior in scores of ways. Our free booklet shows many of them. Why not send the coupon for your copy? And we suggest that you call in an architect or interior designer to show you the possibilities of Pittsburgh Glass. If you have trouble getting in touch with a design expert, let us know, and we'll help you.

Pittsburgh Glass Products are available through leading glass jobbers and mirror manufacturers, as well as our own branches.



GLASS MAKES IT MORE APPEALING! The mirrored columns and large wall panels of Pittsburgh mirrors in this Burt's Shoe Store, St. Paul, Minn., are not only extremely eye-catching, but serve to increase the apparent size of the store. Architect: W. Emil Forman.

For best results . . . use  
**PITTSBURGH GLASS**

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## HOW TO GIVE HAULAGE COSTS THE "Hee Haw"



**M**ULE-DRAWN mine cars couldn't keep pace when a large western zinc mine changed from manual to mechanical loading. Power-driven cars were little better; spotting and switching took too much time. The mine owners wondered about conveyor belts: could rubber handle huge slabs of razor-sharp zinc ore without being cut to ribbons? The G.T.M. — Goodyear Technical Man — said "Yes." On his recommendation two Goodyear belts with heavy-duty reenforced covers were installed in the main haulage-way, with feeder belts running from the side rooms. Now, after several years, all belts are still operating

with little sign of wear, delivering 200 tons per hour at the shaft in a steady, continuous flow that keeps loaders working at full capacity. The hard-working mules are pensioned off — *and haulage costs are down more than 50%.* If you have a stubborn materials-handling problem, perhaps the G.T.M. could solve it with Goodyear rubber. Just write Goodyear, Akron, Ohio or Los Angeles, California—or phone the nearest Goodyear Mechanical Rubber Goods Distributor.

THE GREATEST NAME IN RUBBER  
**GOODYEAR**



## Fall Opening, Defense Style

**B**USINESS MEN who keep up on signs of the times need no sixth sense to perceive the gradual development of new rigors in the political climate. Much more than a seasonal change is in the air as summer's sultry sway yields place to autumn's distinctive variables. Throughout the national scene, familiar institutions are undergoing major alterations. Architects of public policy are now featuring structures with price ceilings, wage floors, smaller storage for profits, larger tax receptacles, priority passageways, and built-in cabinets for rationing cards. No provision at all for "business as usual." Battleship gray, service khaki, and inflationary red are fashionable shades for color schemes.

Political air conditioning is included as standard equipment. Behavior of individual temperatures probably will be the subject of further experimentation and polling. Meanwhile, the sloganeers are working overtime at their hortatory trade. Evidence appears in the epidemic of lapelitis. Never has the public had its pick of so many buttons, badges and labels.

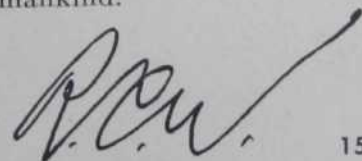
Life is lived to a ceaseless accompaniment of foreign and domestic alarms. Freedom is moulded to an "emergency" pattern. Patriotism's bright lexicon is searched for timely texts, and ancient worthies are roused from peaceful graves to serve as spiritual buglers for a nation uneasily arming against it knows not what. With patriotic persuasions set to marching music the country goes blithely singing and whistling to its fateful appointment with destiny. The oldest inhabitant is hard put to remember a period in which public fervors were more qualified with private fears.

In the midst of the accelerating boom, communities and interests now basking in the sun of unprecedented demand for goods and workers are tormented with doubts about the hereafter. Current record buying by wage earners, they are beginning to feel, is borrowing deeply from

future sales. Suppose the swollen stream of government orders should suddenly dry up? Could business make the shift back to old markets in any semblance of its former independence and solvency? What about the plant capacity expanded and financed in the name of defense? How are dislocated labor staffs to regain their places in the "home" industries from which defense has called them? Will consumers ever again have the free choice of models, sizes, colors and prices to which they have been accustomed? Will established products win back the markets lost to substitutes? What will happen to distributors and dealers able to plan only in terms of public policy subject to change without notice?

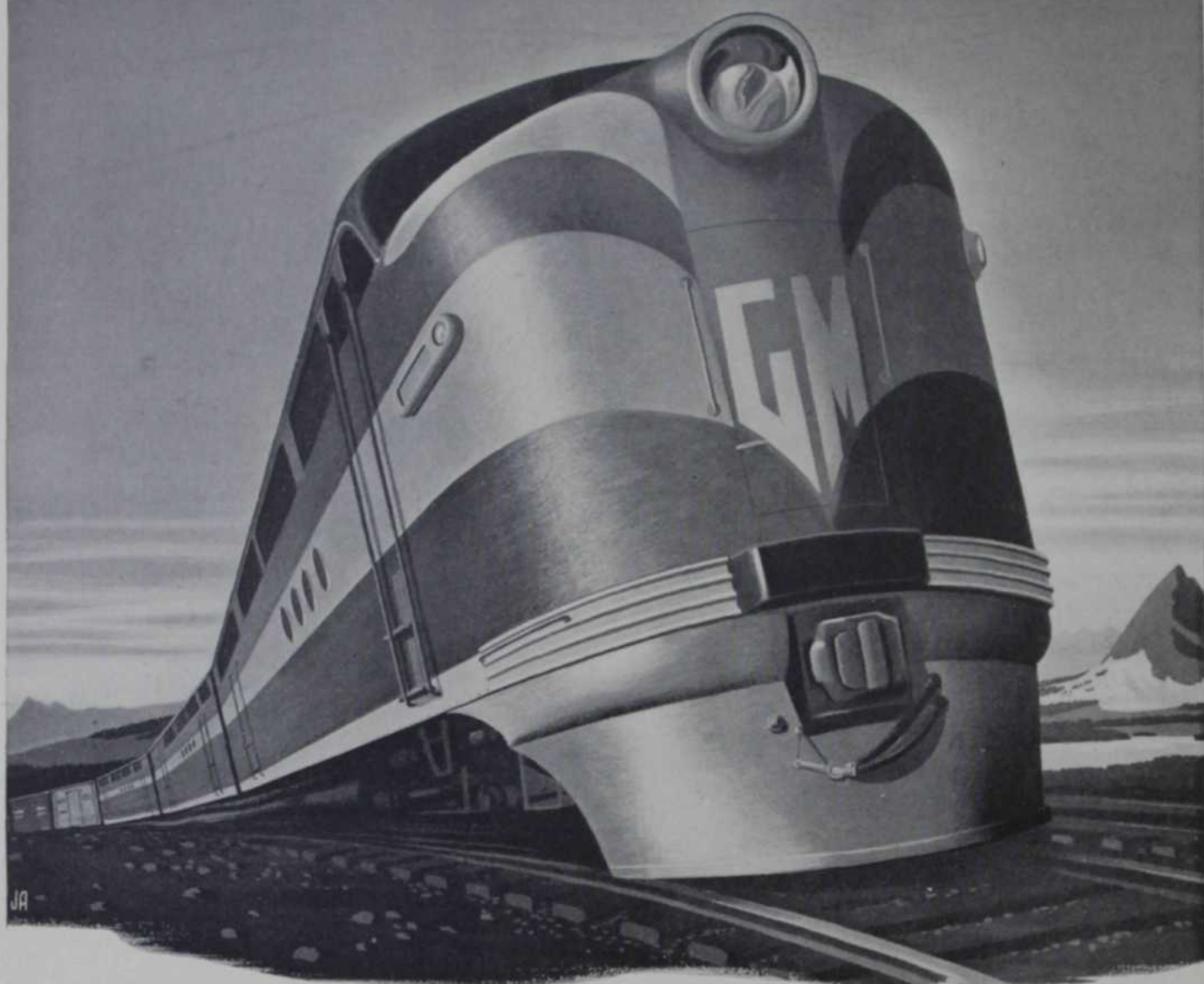
Short of a haze filter powerful enough to enable the national vision to penetrate to the farthest reaches of the autumn landscape, the view of business must be limited to the immediate foreground. Apparent enough is the enduring forest of government, now thickened with the lush growth of defense agencies. How management is to find the open ground where it will have scope to show its worth is a problem which presses for solution in the nation's interest.

It may well be that the characteristic devotion of business to the cause of domestic security and well-being will reveal the true path by the lamp of its own faith. To a world darkened with the vast tragedy of war the persistence of business men's concern to satisfy normal human wants for goods and services is a beacon for the heart as well as the eye. The realtors have some words for it. "Open and lighted" is public notice to all concerned that America is still doing business at the old stand—with the prayerful hope that interruptions during alterations are for the good of the whole order of mankind.





# NEW POWER, NEW SPEED FOR FREIGHT!



... thanks to General Motors, the biggest builder of locomotives in the world

**T**HE locomotive you see here is the swiftest, yet huskiest heavy hauler ever to tackle the railroads' biggest job.

It promises to save precious hours of time in hauling the nation's goods—hours that will hasten the work of National Defense.

It enables the longest freight trains to move from standstill to top speed not only faster, but so smoothly that lading runs less risk of damage—to keep clicking through division after divi-

sion without stopping to refuel for at least 500 miles.

It brings to freight service those vast Diesel economies that the most profitable passenger trains now enjoy.

And like the modern passenger locomotive it resembles, it is the product of General Motors—from whom forward-

looking railroad management has been buying its greatest number of locomotives for the past three years.

That means, of course, these new high-powered haulers are also built by standardized volume production—with their Diesel engines, electrical equipment, frames, bodies and other parts all made and assembled in one self-contained factory—from which they roll all set for service, complete from rails to roof.

**GENERAL MOTORS**  
**LOCOMOTIVES**

ELECTRO-MOTIVE CORPORATION  
Subsidiary of General Motors  
La Grange, Illinois



# Transportation Reports for Defense



AMERICA stands throughout the world today for one thing—productive capacity.

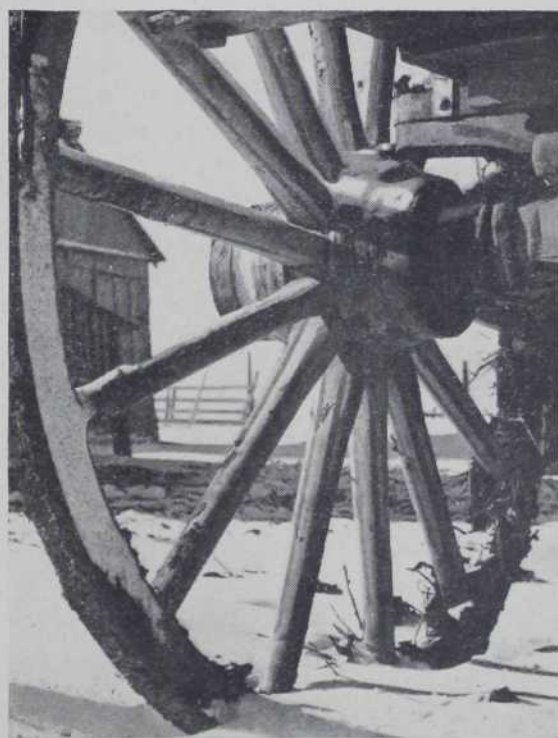
American mines, American mills, American forests, American farms are expected to provide all things needful, not only for American life but for the stupendous struggle abroad.

An essential part of the unparalleled productive capacity of America is its transportation. Transportation is part of every farm, part of every factory. It is the farm wagon multiplied. It is the factory assembly line extended. Without it, neither coal in the mine, grain in the shock, logs in the forest, ore in the ground, steel at the mills, nor any other of the thousands of things which men need and use would be of real value, whether for daily life or for defense.

Transportation is part of an intricate and endless chain. Start at any point on the chain and sooner or later, by few steps or many, you may come back to where you started. Iron ore scooped out of the Minnesota ranges by giant power shovels, loaded into cars, thence into ships, thence again into cars, and finally charged into the blast furnaces, along with coke, limestone, and the alloy metals, makes the steel which in turn may find its way back to the Minnesota ranges to scoop up more iron ore to make more steel.

Block that process at any point, and things dam up. The effect of the blockade may show itself as a shortage of production or as a congestion of transportation, but, however expressed, the thing that has happened is the same—a moving process has been stopped, and every part of the intricate machine of American production feels the jar of its stopping. Slow it down anywhere along the line and the whole line feels the drag.

True of every step in the production-transportation-distribution-consumption cycle, this is doubly true of the transportation which is inextricably part of every product—part of the food we eat, the clothes we wear, the houses in which we live, the machines we use,



MC MANIGAL

**Transportation is an essential part of every farm, part of every factory**





Unless we can move it where needed,  
nothing we produce has real value

Concern is natural

Tomatoes for Britain

the fuel which heats those houses and drives those machines, part of the soldier's gun, of the sailor's ship, of the airman's wings, part of everything.

No wonder that the first question which comes to mind in time of crisis is, "How do we stand on transportation?"

How are we equipped, and how are we organized? How can we get the most and the best out of what we have or can get? Can transportation do its part of the job?

To find the answer to those questions in this present time of quickening demand, let's go back 25 years—to 1916. The interior commercial transportation of the United States in those days, other than the ships on the Great Lakes and the pipe-lines through which crude oil flowed from fields to refineries, consisted almost entirely of railroads. On the rivers, the palatial packets of an earlier day were making their last stand. On the limited mileage of improved roads, a few thousand hard-tired trucks ventured from city to city. But, for the most part, outside a few specialized fields, *transportation* in the United States meant, in 1916, *railroads*.

No longer is that true. There is more water shipping capacity than in 1916. Ships on the Great Lakes and boats and barges on the inland rivers and canals are hauling more ton-miles of freight—about 18 per cent of the whole. The hundreds of thousands of freight-carrying trucks on the highways haul another eight per cent. But add them all together, and add in the 12 per cent which moves by pipe-lines as well, and it still leaves 62 per cent of all the freight to be hauled on rails.

The railroads are, and will continue to be, the major dependence for general all-round transportation. They will be called upon to do the biggest part of a big job. There is a natural concern, and some anxiety, as to their ability to do it—so that's why we'll take up first the question:

How about the railroads?

## 1 ★ How about the railroads?

**Memories of 1917. Millions of cans of tomatoes. Why-didn't-yuh do this? Idle cars are expensive. So they said the railroads "broke down." Looking for a few facts.**

A GOOD many persons remember, imperfectly, what happened to the railroads in the World War. There are those who remember 1918 and want no more of it. They hear rumors of things to come and are disturbed by what they hear. There are others who also remember 1918 and who, by reason of predilection for what is euphemistically called "public planning," would not be altogether displeased if the chance should come again for public management to take over the most vital and intimate part of every sort of production—transportation. They, too, hear things and sometimes make a good deal of what they hear.

They tell at the Association of American Railroads of the Washington newspaper man who came to them, a few weeks ago, to inquire about the "car shortage" which was preventing the United



States from shipping so many million cans of tomatoes to the aid of Britain. He had the story, he said, from someone in the O.P.M. but, before printing it, he wanted to check it. The railroad people hadn't heard about the "shortage," but, together with the newspaper man, they called the government agency which was supposed to have lots of tomatoes and no cars.

"No cars!" snorted the man called. "No cars! Got all the cars we need and can get more if we have to have 'em. What we haven't got is the tomatoes."

## Predictions still thrive

That disposed of that, as similar inquiry has disposed of many another report of "car shortage." But it does not answer the insistently repeated *predictions* that there's going to be a jam in transportation—predictions which inspire a fine wringing of hands over the dreadful things to come, or a loftily superior "why-didn't-yuh?" addressed to the railroads.

"Why-didn't-yuh?" is in danger of becoming a key-word in the defense program.

As addressed to the railroad business the remark is:

Why didn't you buy more cars in 1939 and in 1940 than you did? Why are you buying cars in 1941 and 1942, when steel is needed for guns and tanks and ships and all the rest? Why didn't you foresee all this and stock up way ahead on cars?

To all of that there is an obvious "why-didn't-yuh" retort, but there are also good reasons why the railroads did not buy more cars.

The railroads said, at the outbreak of war in Europe, that they would keep ahead of demands for transportation. In the eight months between that time and the beginning of the American defense effort, in May 1940, they ordered approximately 60,000 freight cars. In the year between the President's address of May 16, 1940, in which he asked for modest appropriations for additional defenses for America, and his May 27, 1941, proclamation of "unlimited emergency," the railroads ordered 113,000 more for 1941 delivery. That's a good many cars and—as the event has proved so far—enough to meet demands without car shortage, even though the defense program has been multiplied many times.

For the railroads to have bought more cars than they needed would have been neither good economics nor good defense. Freight cars can't be put away on shelves or in bins. They have to be stored on tracks, in the open, and there they deteriorate with time. It costs money to own freight cars which are not in use. As need grows, the railroads say, the car supply will grow with it—the plan is for an addition of 120,000 cars in 1942—and its growth will not be at the expense of any single item essential to defense.

But, regardless of reason and whether justified or unjustified, there is an anxiety about railroad capacity this fall which not even their record of superb performance has dispelled. So that's another reason, in this quick survey of transportation in defense, to take a look at railroads first. Since the feeling stems in large part, at least,

**Oops! Wrong shortage**

**Second-guessers are active**

**Where other means are unavailable, the human back bears transportation burdens**

GENDREAU





from recollections of what happened in the World War, let's start back with those days and come forward.

In 1916, railroads hauled more freight more miles than had ever been hauled before in any one year in the history of the United States or any other country.

In 1917—24 years ago—the United States entered the World War. Nine months later, lacking a few days, the railroads which had made the 1916 record passed from private management into a period of operation by the Government.

Why?

The reason, according to the accepted folk-lore of the period, was that the railroads "broke down" under private management, could not handle the war load thrust upon them. The Government had to take them over to keep America's war effort going.

If those were indeed the facts, and if the emergency of 1917 did actually show that the transportation service essential to waging war and carrying on commerce could be performed only under government operation, then America faces the prospect, like it or not, of government operation of transportation—because transportation must go on, regardless of who runs it.

But what are the facts? What did happen in 1917?

### Why Government took over

## 2 ★ What happened in 1917

**Mr. McAdoo's "potent causes." Squeezed between priorities. Even Government can err. Thirty cars in space for ten. The public bought and bought. 180,000 more men, three per cent more business. Railroad cars used as store houses.**

ONE forgotten fact is that, in 1917, before the Government took over their operation, the railroads produced nearly nine per cent more ton-miles of freight service than they had produced in the previous record year of 1916.

One remembered fact is that, before the end of 1917, there was acute congestion in transportation. As to the causes of the congestion, there is no need to search records or make elaborate studies. William G. McAdoo, who became Director General of Railroads for the Government on January 1, 1918, writing in the fullness and freshness of contemporary knowledge, gave the facts in his first annual report.

The causes of transportation congestion—the "potent causes," as Mr. McAdoo called them—were not entirely, or even chiefly, within the transportation plant itself. They were, almost without exception, in the conditions under which transportation was expected to do its work.

One of the "potent causes" Mr. McAdoo mentions was priorities in transportation. To some minds, emergency, threatened emergency, prospective emergency, even imaginary emergency, spells *priority*. Materials may need to be rationed in time of scarcity of supply and emergency demand to insure that they be put to the most urgently necessary uses. Theoretically, perhaps, there should be also emergency rationing of transportation. In practice, the attempt to ration transportation through the priority method did not result,



The locomotive has a universal lure for small boys. Few ever outgrow it entirely



except in rare instances, in the advancement of the more essential shipments. It resulted merely in disrupting the orderly movement of freight, in clogging the ordinary channels of commerce, and, finally, in producing, not more transportation service, but less.

Read, if you want details, what Mr. McAdoo said about the results of a system under which zealous procurement agents loaded tens of thousands of cars with freight and garnished them with little tags which gave them "priority and preference" over other cars except those which might also bear the same tag. The railroads rushed these cars to or toward the ports and the great government projects.

At least the cars were rushed until they began bumping into streams of like cars, all piling into places where no one was ready to receive and unload them and release them for other service.

As Mr. McAdoo pointed out, "even in a single department" of the Government there was a "lack of central control . . . to decide upon the degrees of importance in priority." The results were what might have been expected: yards choked with cars, more than half of them perhaps bearing the Government's priority tag, and no one to tell the harassed yardmaster which priority had priority over all the other priorities.

But government priorities, although they may have been the most "potent," were not the only cause of the 1917 misuse of transportation. There was panic buying in an effort to stock up far beyond current needs.

"Manufacturers bought raw materials in excessive quantities," Mr. McAdoo reported, "and from unaccustomed sources of supply, with the frequent result that arrivals were badly bunched and unloading was slow and difficult."

One manufacturer, in the Pittsburgh district, ordered materials shipped to him at the rate of 30 cars a day—overlooking entirely the fact that the unloading capacity of his plant was only ten cars a day. The result was a jam—not a transportation jam, but an unloading jam, which, however, soon backed up into the main stream of transportation and added its bit to thousands of other like "potent causes" of congestion.

## "Shortage" of movement

The congestion was called, as such things usually are, "car shortage"; but it wasn't that at all. In some places there were entirely too many cars—200,000 of them at one time, for example, stood under load in the northeastern section of the country, waiting for days, weeks, sometimes months, for someone to unload them and let them go on their way. The trouble was not lack of cars, it was lack of movement because cars were so largely used for storage.

To these two major causes leading up to government operation of transportation—unrestrained use of the Government's priority privilege and panic buying in fear of shortages—must be added a third which is not specified in Mr. McAdoo's report. The railroads couldn't continue to meet their costs and make a living under conditions as they were then. The rigid controls of the Interstate Commerce Act were applied to the selling price of the railroads' prod-

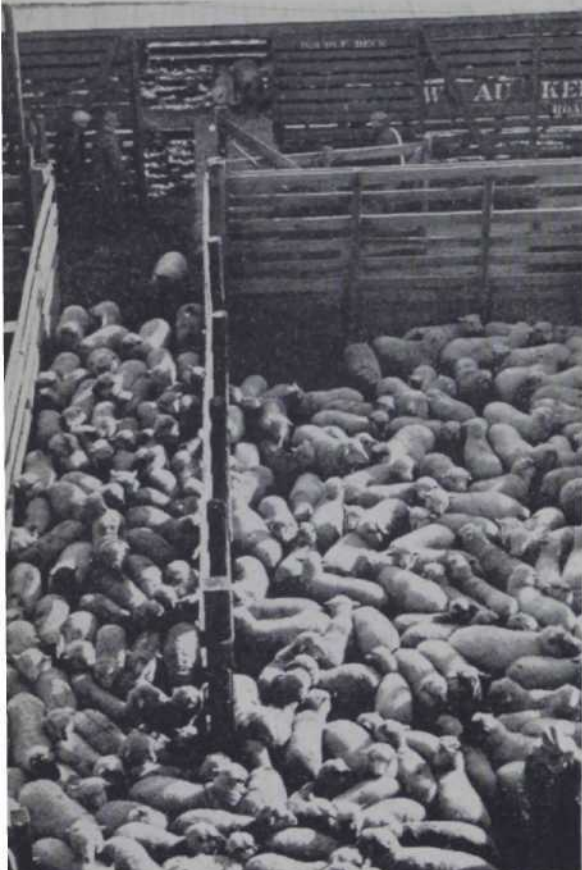


NORFOLK & WESTERN

Keeping track of freight cars to prevent clogging of yards helps prevent "shortage"

Unloaders wanted





VACHON, FROM F. S. A.

Transportation is an endless chain; sheep move to cities, products return to farms

Government doubles cost

The companies' record

uct, while the prices of those things and services needed to manufacture that product went spiraling upward.

So, for reasons which seemed good and sufficient, the Government took over the operation of transportation. With what results?

Having powers which its private predecessors did not enjoy, the Government brought a degree of order out of the wilderness of government transportation priorities. It limited and in some cases abolished the shipper's privilege of routing his own freight the way he pleased, and the individual railroad's right to haul it by its own "long haul" route if it wished. It restricted some services and effected some rather minor economies, such as printing timetables in one uniform black-and-white format instead of in the attention-catching colors which the competing railroads had used. It allowed some increases in rates, although never enough to catch up with the up-spiraling costs.

Thus it managed to move in 1918, the second year of the war, a tonnage which was not quite three per cent more than the ton-miles produced by the privately-managed railroads in 1917.

The test of 1918, however, is not a fair test of government management of transportation. It was carried on in a war year, which was both handicap and help. However the balance may lie between help and handicap, the fact is that, while the volume of freight handled went up by less than three per cent as compared with the previous year, the expenses directly related to the handling of freight increased more than 50 per cent.

The second year of government operation, 1919, can hardly be called a fair test of that system, either, because it was a year of demobilization and disorganization. But, for whatever they may be worth, the facts are that the level of freight traffic in 1919 dropped back to the level of 1916 while the cost of handling it was 86 per cent higher—almost twice as much as the cost of handling an almost identical volume of business in 1916.

To attribute this great increase in unit costs entirely to government operation would be no more accurate than is the assumption that railroads "failed" in 1917 because they were under private management. The times were abnormal throughout this period, as they always are in times of great wars, but it is interesting to note that, in the *war* year of 1917, private operation of the railroads handled 8.5 per cent more freight traffic than did the government operation in the *peace* year of 1919, and did it with 180,000 fewer men on the pay rolls.

### 3★ A crowded 20 years

Billions for new plant. Rivals and colleagues. Trucks, canals and pipe-lines. A network of highways. The airplane picks up a load. Hitler starts wars—and rumors.

ON MARCH 1, 1920, the Government withdrew from the business of producing transportation by rail. In the 21 years since the Government turned the railroads back to their owners, changes in transportation have been so rapid and so profound that their whole meaning has not been grasped even yet.



In those 21 years, for one thing, *transportation* and *railroads* have ceased to be synonymous for all practical purposes.

In the same 21 years, both government and private persons have tremendously increased the investment in transportation plant and facilities, and tremendously increased transportation capacity.

From the beginning of the railroad era, nearly a century before, until the end of the World War, total public and private investment in interior transportation facilities available for use in 1920 probably did not exceed \$40,000,000,000, of which more than \$26,000,000,000 was in fixed plant, and \$14,000,000,000 was in moving equipment.

## Transportation balance sheet

The fixed plant of 21 years ago included railroad tracks, yards and terminals, stations, shops and the like, representing an investment of about \$15,000,000,000; roads and streets, in which about \$11,000,000,000 had been invested; canals and improved rivers on which about \$400,000,000 had been spent; and crude oil pipe-lines, in which about \$350,000,000 were invested.

Moving equipment consisted of cars and engines of railroads, representing an investment of \$5,000,000,000; boats on the Lakes and the inland waterways in which several hundred million dollars were invested; trucks, less than one-fourth as many as there now are, and a handful of airplanes, other than those in military service.

There was then, as there is now, a major investment in shipping for foreign service. Such shipping, however, is not directly a part of the internal transportation of the United States. It affects internal conditions, it is true, by its effect upon conditions at the ports—but off-shore shipping is another story, not to be told in this brief study of transportation within America in 1917-18 and now.

What with sinking a good part of our Navy and disbanding most of the Army, the two decades from 1920 to 1940 may have been the years of the locust insofar as American arming for defense goes but, in the development of transportation, they were years such as neither this nor any other nation has ever seen. In those two decades more money was spent to enlarge transportation capacity and to improve transportation performance than had been spent in the entire national history before 1920.

The new investment in roads—not only the primary state highways which are the main lines of our road systems, but also the rural roads which are its branches and its sidings, and the city streets which are its terminals—reached, in those years, approximately \$21,500,000,000.

Add to the investment in roads the value of the vehicles which use them, practically none of which existed 20 years ago, and it appears that in those two decades approximately \$67,000,000,000 was spent on the nation's highway transportation plant alone. Part of that gross investment has been used up, it is true, but something like \$46,000,000,000 of it remains today.

But this is only part of the picture of transportation as enlarged since 1920. On inland waterways, not including sea-coast harbors

### Our equipment for war

### Airplanes were novelties



The truck, almost non-existent in World War days, plays an important part now

SCHIPPER ASSOCIATES



**Linking our coasts together**

**The air becomes a highway**

**Money to move goods**

**Our transportation plant has no rivals in extent, capacity, variety, flexibility**

PAUL DORSEY



and canals, \$800,000,000 have been invested since 1920—not including the much less but still considerable sums which the Government and private interests have spent for ships, barges and tow-boats to navigate these channels.

The Panama Canal, which was only part opened and but slightly used before 1920, has become a major channel of commerce between the coasts of America in those same years.

Investment in pipe-lines has increased by \$650,000,000, while the transportation capacity of such lines has more than doubled.

Air transportation, which did not exist as a commercial operation in 1920, has grown into a system which represents a public investment of \$500,000,000 in airports and airways, and a private investment of approximately \$40,000,000 in the planes engaged in scheduled commercial service alone.

Nor have investment and improvement lagged on the railroads in the same two decades. Net expenditures—over and above retirements—for straighter and stronger tracks, better grades, more and longer sidings, better terminals, better signals, and all the other elements in fixed railroad plants have totaled \$4,500,000,000, while net investment in new rolling stock, over and above retirements of older cars and engines, has totaled \$1,250,000,000. Gross expenditures for these purposes totaled \$10,500,000,000.

## Heads still shake

Gross investment in new and improved transportation within the United States in the two decades from 1920 to 1940, it is reasonable to say, has been about \$80,000,000,000, with an increase in net investment of nearly \$55,000,000,000. The result? A transportation plant which in extent, capacity, variety and flexibility has never been approached here or elsewhere in the world.

Yet, with all this transport, from the day that Hitler's armies entered Poland, there have been doubtful shakings of the head and doleful prophecies over the prospective inability and incapacity of American transportation service, under individual and private managements, to meet the new demands arising from war and the old demands of commerce.

Partly because of the recollection of the fact that Government did take over the railroads in 1918, partly because the financial difficulties of railroads during the depression have been more advertised than their very real physical progress, and partly because of the overwhelming importance of railroad transportation in any national effort involving mass production and distribution, most of this concern has centered itself upon the railroads.

It is true, also, because of the overwhelming importance of mass transportation by rail in times of emergency. In the long years of low business, the railroads tried to reduce their unprofitable mileages, to take up their unused track. One such effort was that of the Southern Pacific to abandon the 140 miles of its original line which passes through the rough and almost unsettled country north of the Great Salt Lake—a line almost unused since the Lucin cut-off was built straight across the Lake itself.



To that effort the War Department objected. The San Francisco Bay area, the Department said, would be vital in the event of war in the Pacific, and every rail line reaching toward it, even though it admittedly was of little use and no value for commerce, should be maintained as an insurance against the breaking or blockade of the lines regularly used. The Interstate Commerce Commission declined to permit the abandonment. As a result, for nearly a decade the Southern Pacific Company has maintained, at a loss, a facility almost purely for emergency defense transportation.

For a decade, also, railroads—along with other businesses—had been lectured and admonished about being overbuilt, having too much plant and facilities. Those were the days when we had “too much” of everything, and the efforts of the “best brains” were directed toward reducing surpluses. But with the approach of emergency, the cry changed to an anxious apprehension that there might be too little. The same railroads—and other businesses, too—which had been roasted for not reducing capacity fast enough were put on the fire again because they had not increased their plant and facilities faster.

Before the war in Europe was 48 hours old, and long before there was any real thought of re-arming America, the prediction was made that the railroads would be unable to handle in the fall of 1939 the business which it was evident would be thrust suddenly upon them. The anticipated increase in demands for transportation came and came fast. Housewives, remembering difficulties in getting sugar back in World War days, stormed the stores to lay in stocks. All sorts and conditions of business men began to make protective purchases in anticipation of shortage in supply.

## 4 ★ When the test came

**Business up 55 per cent. 856,000 cars a week. Old fears go to rest. The shipper does his part. Truck tires make a difference. Inspiration from a wheat crop. Car shortage an obsolete word. Heading off a glut. The defense program starts. Emphasis on movement means fewer cars needed.**

BY OCTOBER, railroads were handling 55 per cent more carloads than they were six months earlier. No such rise has ever been recorded in so short a time, but, contrary to the predictions of many, and perhaps the half-hopeful anticipations of some, the railroads took the rush in their stride. At the peak week of that year, when more than 856,000 cars were loaded and moved in six working days, there was an average daily shortage of 60 cars, arrived at by counting as a shortage every car order not filled with the particular type of car ordered on the day it was ordered—but on the same days there was an average daily surplus of more than 67,000 serviceable cars.

Obviously, something was wrong with the calculations of those who dreaded or anticipated a failure of transportation.

Part of that something was failure to take sufficient account of the vast expansion of transportation capacity of all sorts in the years between the World War and the outbreak of the present war.

Another and an even larger part was a failure to recognize what



SOUTHERN PACIFIC

**Not only better trains but better tracks and control speed today's freight movement**

**67,000 surplus cars**

**Why predictions failed**



private transportation management had done in those years to get more production out of the better transportation plant which billions of investment had made possible.

"Private transportation management," as used here, means more than the management of the transportation enterprises themselves. It includes the traffic management of those who use transportation, the shippers and receivers of freight. Since a freight car spends about as much of its working life being loaded and unloaded as it does being moved, the men who order the cars, who load them and bill them out, who receive them and unload them play a vital part in achieving a maximum output of transportation.

## What critics forgot

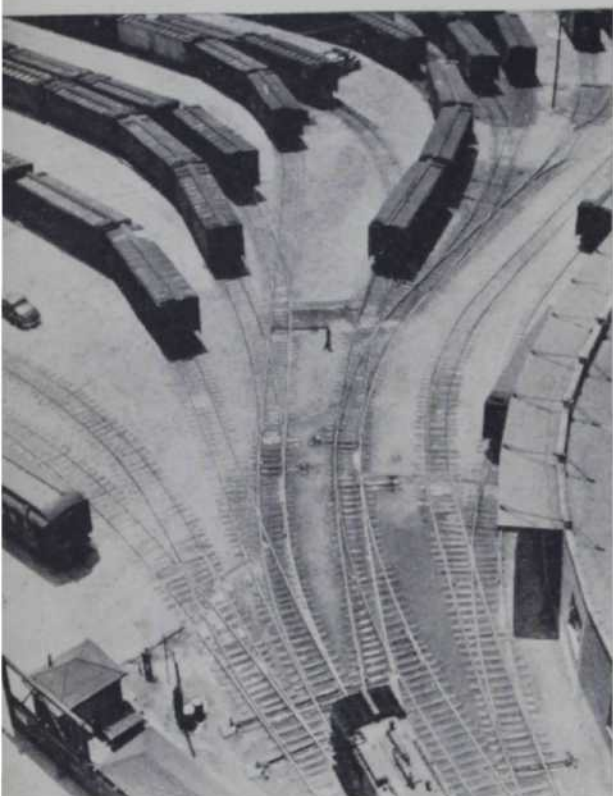
The physical change and progress in transportation in the past two decades has been little short of revolutionary. To name but a few of the most conspicuous developments: pneumatic truck tires, detachable semi-trailer truck bodies, new high-compression motors; new high-horsepower, high-speed steam locomotives, Diesel-electric switch engines, high-speed Diesels for road service; air-conditioning and streamlining; new signals, interlockings and traffic controls; low-wing airliners capable of carrying tons of freight across the continent in a day or a night; and scores of other developments which have changed the quality of transportation as well as its capacity.

But no one of these changes in physical plant is as important as the change in the attitude of shippers and carriers toward each other which has taken place in the same years. They have recognized their mutual responsibility for successful transportation and have cooperated effectively in meeting that responsibility.

Practical organization for cooperation in handling a mutual problem began in 1923, the year when the railroads embarked on their determined drive to rehabilitate their plant. In those days "car shortage" was almost the accepted and natural order of things in years when crops were big and business was good. When the crops of 1923 promised to be big, a group of shippers met at Minneapolis to form the Northwest Shippers' Advisory Board.

It was not uncommon in those days for shippers, in expectation of "car shortage," to overorder their car requirements not only from one railroad but from every railroad in reach, in the hope that, from one of them, the needed cars might be had. Car ordering and car distribution, under such circumstances, became little more than a gamble with everybody losing.

The members of the first Shippers' Advisory Board decided that something should and could be done about it but that it would take both shippers and railroaders to do it. They pledged their help to the railroads in obtaining reasonable advance notice of requirements, orderly distribution and placing of cars for loading and prompt and complete unloading. Contact was made with the railroads through a committee of practical operating men—the men responsible for handling cars and running trains. The plan was neither elaborate nor grandiose. It was all unprecedented and informal—but it worked.



Box cars must be stored outdoors; it is expensive to have too many of them idle

All gambled and lost

All help—and win



It worked so well that there was no shortage in the Northwest during the harvest that year. It worked so well that the idea spread to shippers in other sections with the result that, within two years, there were 13 such regional Shippers' Boards, covering the entire United States, each one cooperating within a territorial district of the Car Service Division of the Association of American Railroads. A dozen years later, the 13 regional boards formed themselves into a national association of Shippers' Advisory Boards, organized to deal with matters which are broader than the territorial districts.

Since 1923, nothing approaching a general car shortage has occurred in the United States. That was true in the big boom years of the '20's when car loadings passed 1,000,000 a week time after time. It was true during the depression years, during the various spurts of recovery and the relapses between them, and, most recently, during the period of the new war and the first year of America's rearmament.

This record is due to a combination of causes, of course. It could not have been made without the better plant created by billions of dollars of investment, and the better methods which that better plant made possible. Freight cars which average eight tons more carrying capacity and which make six or seven times as much mileage between repairs or detention on the road by "hot boxes" and other such causes, play a part. Better locomotives which not only have 43 per cent more pulling power, but which have two and three times as much horsepower per driving axle, which get twice the power out of a pound of fuel, and which run about five times as many miles between major overhauls, help, too. Better track, with 20 times as many miles of 110 pound rail, or heavier, as there were 20 years ago, with better ties and ballast, and with better grades and curves, is important. So are better and more adequate yards and terminals, through which trains are handled with less delay, and better signals, which keep trains moving as they never moved before.

## More service per train

These and a host of other causes have produced freight trains which run nearly two-thirds faster, on the average, and which have an hourly output of transportation service per train more than double that of 20 years ago.

It was with this background of experience and organization that the chiefs of the railroads met in Washington September 19, 1939, less than three weeks after war broke out in Europe, checked over their situation and assured the country that railroad transportation would be adequate to meet demands in sight—and that, as need developed and it appeared that more cars and engines were needed, more cars and engines would be had.

The winter of 1939-40, it may be recalled for those of short memory, was the period of the "phoney war." The housewives who had hoarded sugar found that the stores were still full of sugar; the manufacturers who had loaded up with raw materials found that they had nothing to do but fabricate them, try to sell the product and go out and get more materials. The result was not exactly a slump

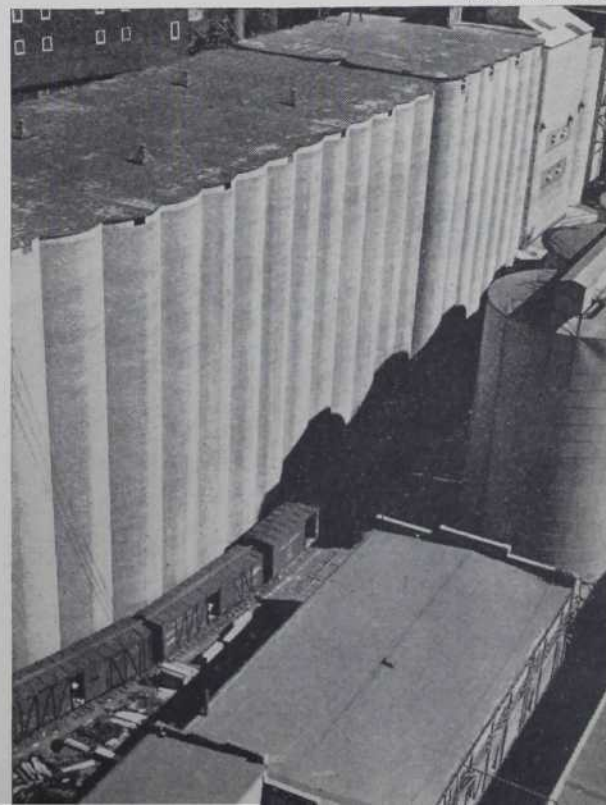
## Others take the hint

## Immune to boom or bust

## Fuel goes twice as far

## When elevators were full, no ships in sight, grain movement to the port was stopped

VACHON, FROM F. S. A.





The railroads had learned

Heading off congestion

Matching goods and space



Iced cars protect health, mean better diet for soldier and civilian alike

but a distinct slowing-up, with a sharp falling away of transportation demands from the October peak.

But the railroads had learned from their experiences of 1917. The Government, and most especially those departments having to do with defense, had learned, too. The Allies—that being when there still were Allies and not just Britain and her Dominions—continued to buy and send their ships to American ports for the goods. The railroads continued to strengthen their transportation organization.

On November 7, 1939, a Port Control section was set up, with a manager at New York who receives daily or semi-daily reports of the situation at all Atlantic and Gulf ports. His job, and that of his staff, is to watch for congestion before it starts and to head it off, to let no glut of goods go into a port which is not in position to unload the cars. In that work, all transportation interests have cooperated in the finest sort of way—not only the railroads, which necessarily have had to take the lead in the organization, but the steamship interests and the local port authorities, because no port, no matter how much it may want business, wants to become choked.

The method of preventing such a happening is simplicity itself. Knowing the situation at a port, what cars are on hand and how long they have been there, what the storage space is, what ships are there and what ships are coming, it is no great feat for one with experience and authority—and the Port Control section has both—to head off cars that cannot be unloaded and handled promptly from coming to a port.

Only once, in fact, has it been necessary for the section to close down on the movement to a port, but that once illustrates how the plan works. In the first winter of the present war, the grain elevators at one port were full, with no ships in sight. Had trains of grain kept on rolling to that port, the result must soon have been the sort of congestion which was accepted as inevitable in the World War. The rolling of grain cars to that port, therefore, was stopped until ships had come in, carried away some of the grain already there, and made space in the elevators. The preventive was simple and effective. It required no elaborate intervention of Government; nothing, indeed, except knowledge, authority and the cooperation of the several branches of private transportation management concerned.

## The defense effort starts

Spring came, and the invasion of Norway, of Denmark and the Low Countries. France fell. Italy entered the war, the "Miracle of Dunkerque" was accomplished, and by June, just a year ago, the United States awoke fully to the fact that once more she must hasten to arm herself. The great defense program began—although it did not begin, if you will recall, as a great program. It began as a rather small affair, a mere matter of an additional \$1,000,000,000 or so, which, from time to time, has been extended and stepped up to the present multi-billion dollar program.

But small or large, private transportation management prepared itself to meet what was ahead. The railroads, having an intimate knowledge and a keen memory of the experiences of 1917, promptly



strengthened their organization to cooperate with the military authorities in moving men and materials. On August 1, 1940, a Military Transportation Section of the Association of American Railroads was created, adequately manned, and put at the disposal of the defense departments of the Government.

In the summer of 1940, the President appointed Ralph Budd, president of the Burlington System, as the transportation member of the Advisory Commission to the Council of National Defense. Because transportation was so well organized to meet emergency demands—that being part of the business of transportation—Mr. Budd has not found it necessary to surround himself with an elaborate congregation of committees and coordinators. He has found ready to hand, and willing to help, such governmental organizations as the Interstate Commerce Commission, the Railroad Division of the Reconstruction Finance Corporation, and the Bureau of Research and Statistics.

## Transportation was mobilized

He has found, also, such commercial and technical organizations as the Association of American Railroads and the American Railway Engineering Association, the American Trucking Associations, the Lake Carriers' Association, and other transportation bodies. He has found such shipper organizations as the National Industrial Traffic League, the Transportation Department of the United States Chamber of Commerce, the regional Shippers' Advisory Boards. All such organizations, going concerns which cover their respective fields, have made their records, their personnel and their accumulated experience available to the Transportation Commissioner.

Transportation was organized, ready to go ahead to do whatever else was necessary to meet the needs of defense.

In that summer only a year ago when the name and the fact of *blitzkrieg* burst upon the world, it was obvious that the supply of cars would be ample for the fall peak loading—which, in fact, proved to be less than the loading of 1939—but in anticipation of 1941's traffic, the Association of American Railroads and Commissioner Budd made recommendations to the railroads that they acquire some 100,000 new freight cars by the end of this year. The recommendation is being observed.

More recently, and in continuation of the same policy of looking ahead to the predictable future, the railroads have accepted a recommendation of their Association that 120,000 cars, in addition to retirements, be added to the supply in 1942, and that plans be put under way for a further orderly increase of 150,000 cars in 1943—a program which looks large in the aggregate because it is projected well into the future but which, after all, amounts to little more than 10,000 cars a month, which is well within the productive capacity of the railroad and privately owned car plants.

Provided, that is, that railroads and car builders can get deliveries under their priority orders on materials ordered months ago. During the summer of 1941, delivery failures set back the



Even shackled to bad roads, early motor trucks proved their worth, won followers

### The blitzkrieg begins

10,000 new cars a month

Materials are ordered





EWING GALLOWAY

**We have spent more than \$800,000,000  
on our inland waterways since 1920**

building program by as much as 8,000 cars and further delays are expected to set it back by a total of 20,000 cars by October. More serious than the inability to get materials for new cars, however, is the depletion of stocks of parts and materials necessary to keep the existing stock of cars and locomotives, and the rest of railroad plant and equipment, in good operating condition. Difficulties in getting such materials are reported, even where they are covered by priorities.

When the railroads announced at the beginning of May, 1941, their plans for adding some 10,000 cars a month in 1942 and 1943, the announcement was taken by some as a startling reversal of railroad policy.

"The railroads," they said, "have heretofore claimed that they didn't need more equipment, and have not provided themselves with it; now they confess that they do need it, and are rushing out to buy it."

Wrong, on every count. The railroads have not said that they would not need more equipment. They have said since September, 1939, that they would, and that they would get it in advance of needs. Between that date and the coming of this year's fall peak in October, they will have acquired 1,000 new locomotives, 375 steam and 625 electric and Diesel-electric, more than 150,000 new cars and 27,000 rebuilt cars. These new cars, after the retirement of the least serviceable of the old cars, will give the railroads a supply of approximately 1,600,000 serviceable freight cars, in good order, by October, 1941. That is 150,000 more than they had in good order when they successfully handled the record-breaking up-rush of traffic in the fall of 1939.

That is a lot of new cars but it wouldn't be enough—you couldn't put enough cars on the rails—to move all the business in sight *unless* cars are used for the purpose for which they were built—*movement* of freight, not its storage.

## 5 ★ Design for transportation

**What, no super-board? Two principles that work. A triumvirate that moves goods. Operating a planless plan. The Army gets its stuff. One word that relieved congestion. Business groups can help. As the wheat crop goes to market. Suppose the Canal is closed. Getting ore to the Great Lakes and getting coal back.**

TO ACCOMPLISH THAT, the railroads long ago worked out their plan. It doesn't contemplate some super-board of control sitting in Washington or anywhere else. It does contemplate that things shall continue to move along in the ordinary way, without violent changes or disturbances of satisfactory routines and relationships. It is based on just two principles:

**Those who know how**

First, the railroads say, the best traffic managers for any movement of freight are those immediately concerned—the shipper who has something to ship, the transportation agency which carries it, and the receiver who wants to get the freight that is coming to him. For every one of the millions of freight movements made every day, these are the persons who know best what they want done and how



to get it done. They will make mistakes, of course, but they are no more likely to make mistakes than is some super-board of traffic control, and if they do, the mistakes of individuals among such a number have a way of cancelling out.

So that's the first principle—don't try to centralize traffic control. Leave it where it is, among those who know most about the movements of the particular freight in which they are interested; *provided*—and here's the second principle—that nothing shall be loaded into a car unless it is known that it can be unloaded at destination. As to that, the Car Service Division of the Association of American Railroads can supply the necessary machinery—as witness the case of the port whose elevators became filled with export grain which could not be moved for lack of ships.

## Business as usual

Sounds, doesn't it, almost like that phrase uttered so often with such fine mouth-filling scorn—"business as usual?" And why not, when that happens to be the best way to get a thing done?

Now how does this apparently planless plan of private transportation management work?

Take first a glimpse at the Atlantic and Gulf ports. Efficient operation of any seaport where vessels come and go requires that there shall be maintained a "bank" of freight held in cars, ready to be moved up promptly to shipside as vessels berth for loading. To insure against having ships in port and nothing ready to put in them, such a reserve of freight awaiting ship loading usually ranges about five days' loading. Cars of export freight on hand in the Atlantic and Gulf ports of the United States are averaging about 4½ days' loading, just about a satisfactory bank of business to keep the ports working and the ships going without loss of time. The ports as a whole are wide open and thoroughly liquid, while the port of New York is handling, month after month, a flow of business ranging from two-thirds that of the World War period up to even more than was moved in those days—and is doing it so smoothly, with so little delay or difficulty, that the public generally doesn't know it is being done.

Take another illustration—this time on the military side. For months past, the railroads have delivered without a hitch approximately 5,000 carloads of materials every day to the scores of defense projects which have been under construction and, through the teamwork of the receivers of the freight, those cars have been unloaded and released to the railroads for other service within an average time of one and three-quarters days.

One more illustration, this time from just an ordinary private business, a company which requires about 100,000 rail cars a year to handle its normal business. Faced with the possibility of having to extend side-tracks and enlarge loading docks at some of its several plants to handle an increasing business, the traffic management of the company checked into its own practices in ordering raw materials and shipping finished product. It found that the depression-born custom of specifying "carload minimum weight" on all orders

**They will make mistakes**

**So would others**

**Our ports are ready**



**Transportation police today not only protect shipments, they guard against sabotage**



for materials was cluttering up its unloading facilities with more cars than were needed. A change to specifying "maximum carload weight" took care of that in short order, with savings all along the line.

More materials delivered in fewer inbound cars meant more space for more prompt and economical loading of outbound products as well. Moreover, said this alert traffic management, if it is good for us in these times to get our supplies in maximum cars, instead of minimum, wouldn't it be better still if our customers would let us ship to them in the same sort of loads? The customers were approached, many agreed, and that is now the practice—fewer orders to handle, less sales effort and billing cost, fewer cars to load, and more room to load them.

Another major shipper has discovered that buying raw materials in maximum carloads, adding another tier of cartons to his outbound loading, and careful checking of his use of package cars is reducing his annual car requirements by the thousands—and at the same time saving him money by reducing his loading costs.

A major possibility for saving car-days—and, as was said at the recent meeting of the National Association of Shippers' Advisory Boards, "A Car Day Saved is a Car Day Made"—is in the fleets of package cars scheduled to leave major distributing centers nightly for all points of the compass. Here is an opportunity for the transportation departments of chambers of commerce to work with their local railroads in bringing about the consolidation of lightly-loaded cars, or the discontinuance of those cars which no longer justify themselves except as an item of pride in the competition between cities or between railroads.



U. S. STEEL NEWS

**Movement of ore and coal to and from Great Lakes demonstrates value of coordination**

#### **World War records fall**

The results of the efforts of many shippers, each one contributing toward heavier loading of cars, has been an increase of one ton in the average load of car-lot shipments in the past year or so—and that is just the same as adding more than 30,000 cars to the supply without costing anyone anything except thought and attention.

With the organized cooperation of shippers, and with the scores of improvements in railroads and railroading itself, the railroads in this year of 1941 are actually handling *more ton-miles of freight than they did in the war year of 1918*—approximately 15 per cent more—are handling it without any of the congestions, delays and "car shortages" of that time—and are doing it with 500,000 fewer freight cars than were available then.

#### **Wheat goes to market**

Yet, in some minds, there is a sort of "wave of the future" as to private transportation management which is one of foreboding, with anxious shaking of heads, not about what has happened but what might happen. Earlier in the year, one of the points on which anxiety centered was the movement of the winter wheat crop. The harvesting, transportation, marketing and storage of this crop is the greatest single job of the sort anywhere in the world, especially since the use of the harvester-combine has compressed the whole process into a few weeks. In ordinary years, the usual practice is for the railroads



to store in advance in the producing areas of the Southwest approximately 25,000 Class A box cars, especially coopered and conditioned for grain haulage. As the harvester-combines begin to pour first a trickle, and then a flood, of grain upon the railroads, this supply of cars is gradually used up—with peak loadings running at the rate of about 3,000 cars a day.

In the ordinary way of business, this grain goes in the first instance to one of the principal southwestern markets—Kansas City, Wichita, Hutchinson, Salina, Enid, Fort Worth, Omaha, among them—where it is sampled, tested in the laboratory, inspected and graded, and sold, this process taking an average of about two days. Reconsigning the car to another market, if it is sold there, or switching it to the destination elevator takes another day, while a fourth day is used up in getting it unloaded and started back to the grain fields.

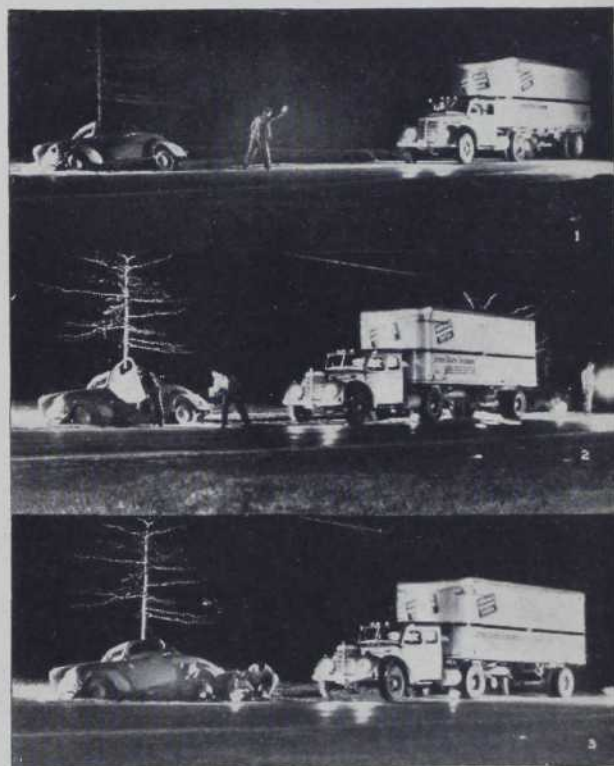
## Loans make job harder

The whole movement is a cycle, with the first flight of cars getting back to the fields for another load before the last of the stored supply of cars is used up. It depends upon cooperation all along the line. At the peak of the movement, inspection is going on 18 hours a day, while the testing laboratories may run continuously. It depends, too, upon space in elevators, somewhere to empty the cars so that they may return to the grain fields.

Right there was a major difficulty in this year's situation, although it was not, except in its incidental effects, a transportation difficulty. The new wheat crop found nearly 400,000,000 bushels of old wheat still in the elevators—nearly 300,000,000 bushels of it under government loan. Most of the government loans were not due until the end of April, and the unredeemed wheat—which is almost all of it—did not become fully the property of the Government until the end of the redemption period, in May. Seventy-five million bushels of old grain was moved out of storage in the interior to more distant storage, at the seaboard or elsewhere, just before and during the movement of the new wheat.

In spite of having to care for this movement, the railroads assembled and stored in the winter wheat belt, ready and waiting for the movement of the new crop, more than 30,000 grain cars—a supply which proved to be more than ample to make good on the announced determination of the railroads to haul "every bushel of grain which could be unloaded." Before the winter wheat movement was over, however, all elevator storage at Kansas City and other major southwestern markets was filled. There was nowhere left to unload the grain. The railroads shifted their reserve grain-cars to the spring wheat belt, in readiness to move the harvest but, before the movement had fairly started, the great elevators at Minneapolis and Duluth-Superior were filled. By the cooperation and understanding of all concerned, the movement of grain to elevators already full was stopped—not for lack of transportation but for lack of terminal space in which to store almost two years' crops at once.

3,000 cars a day



SCHIPPER ASSOCIATES

Truck drivers trained in first aid add Samaritan touch to freight moving

Storing two years' crops



A second much-discussed cause of concern is the prospective withdrawal of ships from the Panama Canal service. Through the canal, ships move between the east and the west coasts of America; between foreign points and one coast or the other; and between foreign points, without touching the United States. Even if all the ships should be taken out of the Panama Canal and the Canal closed to commercial traffic, not all of this traffic would seek the rails, of course.

## If Canal were bombed

But, assuming that all the intercoastal movement would do so, and all the movement between the United States and Hawaii, the Philippines, and Australasia, and a major part of movements between the United States and the Far East, the total maximum tonnage that would be thrown on the rails would amount to no more than about 613,000 carloads in a year. Even this figure is subject to deduction to the extent that much of the canal tonnage now is hauled by rail to or from one or both coasts. Compare this maximum figure of 613,000 cars with the total loading of more than 40,000,000 cars in a year.

Of course the tonnage now moving through the Panama Canal would have a much longer-than-average haul but, with full allowance for that factor, the movement of this business would require the services of fewer than 35,000 cars for the maximum traffic, a figure which includes the 17,500 cars which would be required for the intercoastal traffic alone. To get some impression of the relative size of this job which some prophets seem to think would "break down" the railroads, compare the maximum requirements of not more than 35,000 cars with the 1,600,000 serviceable cars on the railroads.

But, whatever the effect may amount to in terms of tonnage, or ton-miles, or car-days, the fact that the withdrawal of ships from the Panama Canal services does have an effect upon the railroads, and upon shippers, too, is another illustration of the not always recognized fact that our various forms of transportation do not exist and do their work in separate compartments. Railroads carry freight to and from the ships which sail along our coasts, or from coast to coast. Trucks carry freight to railroads, and railroads bring freight to trucks. There is a considerable degree of unrecognized coordination among them all—a practical, business sort of coordination resulting from the necessities of their daily work.

Some of the coordinated movements which have been built up over the years are world marvels of mass efficiency. Notable is the ore-coal transportation on the Great Lakes. Train-loads of ore leave the great diggings on the iron ranges of Minnesota, Wisconsin and Michigan, bound for the special ore loading docks at the head of the Lakes—a ship load of ore to the train. On the cars of these ore trains—high-sided, close-coupled cars only 24 feet long, which carry in weight of ore three times their own weight—there go the beginnings of battleships and bayonets, and every other sort of steel for defense or daily life. As they roll the hundred and more miles

A drop in the bucket



The Army turned to trucks early, gave this, its first one, difficult tests



down from the ranges to the docks, samples taken from each car are given chemical analysis, the results of which are wired ahead. Upon arrival, the cars are lined up according to their chemical content, so that each car can be dumped into the ore pockets, and through them into the chutes and hatches in such an order as to produce in the hold of the steamer the particular mixture of ore desired for that trip.

From the head of the Lakes, the ships steam away, some to the mills in the Chicago district, some to Detroit, some to Buffalo, but most to the string of ports along Lake Erie. There giant dippers unload the ships, pouring their ore into open-top cars, which came to the Lakes loaded with coal from Pennsylvania, Ohio, West Virginia, Kentucky, Tennessee, Virginia, and were made empty by being picked up bodily, turned upside down, and dumped into the hold of a ship. From the lower lake ports the ships go back to the head of the Lakes with coal, while the coal-cars go back to the steel mills with ore.

To interrupt that flow of ore down and coal up would be to break the whole rhythm of American production. And so it is with relief that it can be reported that the ore movement in 1941 is far ahead of previous years—40,216,000 tons by July 1, 1941, as compared with 27,702,000 tons by the same date of last year, while the movement of ore from docks to mills is nearly 70 per cent ahead of last year's. At no time this year, not even just before the coal strike of the spring or the vacation from mining in the summer, has more than a normal accumulation of coal cars awaited dumping at the lower Lake ports.

This ore-coal movement, concentrated during the months of navigation on the Lakes, is coordinated transportation in the mass—unique in scale. All over the nation, however, there are innumerable inconspicuous examples of how America uses two or more means of transportation to get its work done. Trucks are everywhere—and not often does one haul anything which has not been, or will not be, hauled also on a boat or a train.

## 6 ★ 4,500,000 motor trucks

**Foresight will prevent confusion. A pool to speed defense. Private companies help move the Army. Must the East have its oil rationed? Getting the situation in focus.**

WE HAD TRUCKS at the time of the last war, but not many of them, and those we did have were restricted in speed and range of operation by the lack of a dependable pneumatic truck tire. That lack was supplied by 1921, and now America has at its service 4,500,000 motor trucks—more than in all the rest of the world put together.

Trucks engaged in commercial hauling for hire total roughly 600,000, including those which do local transfer work in and about cities. Another 1,000,000 trucks are owned and used by farmers; nearly 3,000,000 are operated privately by various businesses.

A large proportion of these trucks are small, local retail delivery vehicles and the like. Many others are not suitable for general transportation work or, if suitable, are not available. No one really knows just what the trucking capacity of the United States amounts



**Battlefields aren't highways. Modern soldiers still give trucks tough trials**

### Rhythm in movement

**We lead the world**



to—everyone knows that it is huge, both absolutely and as compared with the capacity of the rest of the world.

The United States Public Roads Administration, in cooperation with the State Highway Departments, is taking an inventory of truck equipment of all sorts. With such an inventory, it will be known what trucks we have, what sizes they are, where they are, and what they are doing. Then, in emergency, defense authorities would know where to go for trucks which could be withdrawn from their regular service with the least disturbance.

## Truckmen look ahead

The American Trucking Associations, the national body representing the trucking companies engaged in motor-carrier service, either common or contract, is at work on an inventory of its own, which will include not only data as to the number, type, style and capacity of equipment, but also information as to the way in which it is used—routes, running times, interchange points.

The trucking associations have arranged, during the period of defense preparation, the establishment of a pool of trucking equipment which can be expanded and contracted from day to day to take care of fluctuating requirements in the transportation of defense materials. Provision is also made for the establishment of a central dispatching service to assure the most efficient use of trucks and of loading and unloading facilities.

A second plan of the trucking associations, for use only in the event the United States should actually go to war, adds to this basic set-up an "American Trucking Emergency Corporation" to handle the fluctuating pool of equipment. The first plan, during the defense period, contemplates the use of only equipment of the regular for-hire truck lines. The second and broader plan contemplates the possibility of drawing upon the privately-operated trucks and the farmer-operated trucks, which far outnumber the for-hire trucks. Many of these owner-operated and farmer-operated trucks are available for overflow and off-season work while, in real emergency, any or all of them could be pressed into service. One idea behind present planning, however, is to permit normal trucking operations to continue with a minimum of delay and interruptions, and to meet emergencies with the least possible disruption.

A new and rising factor in transportation is the Army's own fleet of trucks—a force which is expected to reach 286,000 vehicles by this fall—a truck for every five men, on the average. These trucks are not, ordinarily speaking, to be used except in hauling the Army's own personnel, material and supplies—but the trucks are there, and available for emergency service.

The Army itself is using not only its own trucks in its own transportation work, but is also experimenting with the haulage of supplies in connection with maneuvers by commercial trucks. In the 1940 maneuvers in Louisiana and East Texas, a for-hire truck fleet was used to supply the 70,000 men engaged. The problem involved moving from four to five carloads of supplies a day up to a base depot, and the movement from that base to various distributing



U. S. ARMY SIGNAL CORPS

**Train and truck combine to get today's Army there "first with the most men"**

**Preparing for emergency**

**Civilians are remembered**

**Proof of the pudding**



points in the maneuver area. Thirty big trucks—much larger than the ordinary Army truck—were used, to the satisfaction of the Army, which was relieved of having to do the same job with a larger number of its smaller trucks.

Commercial trucks were used also to supply the Fifth Division (Motorized) on its six-day march from its station at Camp Custer, Mich., to take part in the 1941 maneuvers in Tennessee.

A third example of the Army's use of commercial motor transportation, this time in the field of transporting men and their baggage and equipment, was the assembly of the 153rd Infantry Regiment of the Arkansas National Guard at Camp Joseph T. Robinson, near Little Rock, by trucks and busses. Different units of the regiment were brought from 15 points, from 24 to 221 miles away, by vehicles owned by nine different companies, and assembled at Camp Robinson in less than 12 hours.

The motor truck—whether it be an Army truck, a privately owned and operated truck, a commercial truck engaged in hauling for hire—contributes definitely to the transportation capacity of the country, whether in the period of preparation for defense or in actual war. It cannot do what the mass transportation agencies do, but neither can they do what the truck does. Among them, they cover the field—and cover it with a transportation capacity such as the world has never seen.

But in spite of that fact, right from the beginning of war in Europe, there has been more anxiety and questioning about transportation than about almost any other feature of our commercial and defense organization. The first "shortage" that anyone mentioned, and the one most frequently mentioned, has been a shortage of transportation.

So far, there hasn't been any.

The nearest thing to a transportation shortage is the petroleum situation on the eastern seaboard.

## The East and its oil

The transportation of petroleum products is unique. It is, almost altogether, carried on by the petroleum industry itself. That highly efficient and closely integrated industry pumps oil out of a hole in the ground and pumps it into your gas tank, and does everything in between as well.

For years the major movement of oil to the eastern seaboard has been by tank ship—about 98 per cent, according to the report of the Committee of Interstate Commerce of the House of Representatives.

A negligible part, only about two per cent, has come by rail.

Fifty of the approximately 260 ships in the tanker fleet engaged in bringing oil from the Gulf to the Atlantic have been requisitioned for overseas service.

Others may be taken, and consequently there is a threat of transportation shortage.

The threat is being met in a variety of ways—increasing the allowable loadings of the tank ships remaining in the service; cutting

### Army is satisfied

### Soldiers get bus ride

### Whole field is covered

In recent maneuvers, Army depended on commercial trucks for service of supply





### Cars to move petroleum

down the time of loading and unloading to speed up the turn-around; rearranging sources of supply so that more oil will come from the West directly into the interior East, rather than reaching the interior East from the West via the seaboard; additional use of pipe-lines; additional use of railroad tank-cars.

There are in the United States about 125,000 tank cars available for petroleum transportation. With the exception of about 9,000 used by railroads in the transportation of the oil they themselves use, most of these are owned by the oil companies, or by the tank-car leasing companies, or by large oil users. The Army has a fleet of more than 900 which are used largely in the hauling of gasoline for the air arm.

The tank cars so owned are pulled by railroad engines on railroad tracks, with railroad crews, the shipper paying the railroad for the hauling, the railroad paying the tank-car owner a mileage rental for the car.

## Steps to meet a shortage

According to the report which the fact-finding committee of the American Petroleum Institute made to Oil Coordinator Harold L. Ickes, early in June, about 20,000 tank cars were then idle. The number has been considerably reduced since then as they are being pressed back into service to help meet the threatened eastern shortage. Disused pipe-lines are being brought back into service, also, and other pipe-lines are being re-arranged for use in coordination with solid trains of tank cars. One such pipe-line, ending at Lima, Ohio, is pouring its crude oil into solid trains of tank cars for quick movement to a New Jersey refinery where the oil is quickly unloaded and the cars returned, as a solid train of empties, to the pipe-line terminal at Lima.

Similar arrangements are being worked out for other terminals east of the Mississippi River and other refineries on the eastern seaboard.

These, and other special transportation situations, are important and should be watched—as they are being watched. But neither singly, nor all together, do they spell a general failure of transportation. Neither, for that matter, does an occasional tight spot in car supply mean that transportation has failed to do its job. Transportation is a highly seasonal business, and for the railroads or other agencies of transport to maintain such a fleet of equipment that they could handle the brief peak loads without tight spots would mean that entirely too much surplus equipment was rusting away its life in idleness during the other ten or 11 months of the year.

It is every bit as easy to have too much equipment as it is to have too little—during the years of the depression, indeed, it has been easier.

The real question is not whether every shipper of every sort of commodity, essential and non-essential alike, shall be able to get the precise quantity and kind of transportation service he wants on the day that he wants it.

The real question is whether the nation's transportation agencies

### Pipe-lines go to bat



Transportation's job is to handle what comes to it to handle without delay

ILLINOIS CENTRAL



—and especially the railroads which are the backbone of the whole system—are ready to meet essential needs, both of commerce and of armament.

## 7 ★ Four rules for safety

**Transportation has done its job. The facts behind the figures. Summing up. Forget 1917. Remember those cans of tomatoes. Transportation is movement. All agencies have a place in the picture.**

NO QUESTION as to the future can be answered definitely and categorically—but here is the record in this emergency so far!

Transportation has done its part of the job of American production. With scattered and isolated exceptions, no delays and no shut-downs have been due to its failure. It has handled whatever has come to it to handle with a service so superbly uneventful that it passes without notice.

That much is conceded even by those who fear the future.

This brief survey is an attempt to put the transportation situation before businessmen, not as it was in 1917-18, but as it is today. It is an attempt to evaluate the new things in transportation, the new plant, the new equipment, the new techniques, the new managements. It is not an attempt to marshal statistics, but to get at the facts behind the figures; to find the causes for results and to see what American business can do to help itself and to help national defense by helping American transportation to keep on doing its essential part of the job.

To sum it all up, here are the things that businessmen can do:

First, forget transportation in 1917-18 except as a bad dream and a "horrible example" of what not to do.

Second, don't believe everything you hear. When you hear that there is some calamitous collapse of transportation somewhere else, check with your own experiences or go to headquarters to find out. Remember those millions of cans of tomatoes!

Third, remember that transportation agencies can serve only shippers who are ready to ship and receivers who are ready to receive—promptly. Transportation is *movement*.

Fourth, think in terms of *transportation*, not just railroads, not just trucks, or ships or planes or any of the other agencies of transportation, but transportation as a common enterprise of those who provide the service and those who use it.



FECHNER FROM NESMITH

**Transportation is movement. Shippers can help to prevent a repetition of 1917**



# We Can Learn About Price

By A. WYN WILLIAMS

**EXPERIENCE shows that levels rise more rapidly with piecemeal controls than they did in World War days under "business as usual" policy**

**T**HE SIMILARITY between the peace-time economic systems of the United States and Great Britain makes the latter country a useful testing ground for certain economic theories with which the United States is beginning to flirt.

Great Britain has been trying to control prices for 22 months. She has not succeeded despite the fact that skeleton machinery, which it was thought would

check inflation, had been set up before the war and was immediately set in motion when it began. Commodities were controlled, ceilings were put on prices, drastic rationing was applied and private enterprise severely regimented.

Yet, in the first four months of the present war, prices advanced more than

they did in the first 15 months of World War I, when only a single commodity, sugar, was under control, there were no fixed prices or rationing, and the slogan was "Business as usual." While prices have not risen as steeply after the first four months, they are still at a comparatively higher level than for a similar period in the first World War.

The index of retail prices of the British Government's Ministry of Labor showed a rise of 43 points from August, 1939, to April, 1941, against 35 to 40 points from July, 1914, to March, 1916, a period including the same number of war months. Price advances under England's policy of control are not a feature of the retail field alone. The Lon-

Scotch comedian Willie Fyffe entertains British munitions workers at lunch. British workers still have right to strike if they wish

BRITISH-COMBINE





# Fixing from England

don *Economist* index of wholesale prices is up 35 points, while raw materials are estimated to have advanced 70 per cent since August, 1939.

Upon examination, it will be found that England, although most of the machinery to control prices was at hand, did not make full use of it. Instead of anticipating evils and trying to head them off, the machinery was employed piecemeal to remedy evils which had already appeared. A further serious weakness of the English policy was the failure to include wages in the field of control.

In other words, England's war-time price policy, which is a form of planned economy, was one in which all parts of



Right: A British shipyard worker, whose wages are tied to price levels



Rationing permits each man 66 coupons a year, with which he can buy only the articles shown in this photo

the plan had not been integrated. The experiences of the various agencies charged with keeping down prices were similar. When the price of one commodity was regulated, it invited a rise in the price of some other one which had been left uncontrolled. By the time the particular commodity left free was brought under control, the level at which the attempt was made to stabilize its price was considerably higher than it would have been if control had been exercised simultaneously over all commodities at the beginning of the war.

Only in one field was an effective and almost complete control exercised as soon as war began. The Ministry of Health rushed through an Act of Parliament on September 1, 1939, freezing



the rents of working and lower middle class dwellings at their existing levels for the duration of the war and for six months after. The definition of "working class" dwelling was already in existence but "middle class" was assumed to be that below a certain annual rateable value, in London £100 a year.

English rents are, therefore, stationary for the duration of the war for all workers, all the white collar class and professional men or executives, whose incomes are less than a figure which would be equivalent in this country to an income of \$7,500 a year. Rents are not a factor in the advancing cost of living in England.

The other three ministers principally responsible for prices, the Ministers of Supply, Food and the President of the Board of Trade (corresponding to our Secretary of Commerce), exercised their powers in a piecemeal, incoherent fashion. They found themselves running into accumulating troubles because segments of the price structure, not placed under control, were continually interfering with those portions which they thought they had stabilized.

The province of the Minister of Supply, a new official appointed after Munich, was raw materials. He roughly

corresponded to the Minister of Munitions of the first World War and his chief function was to safeguard materials necessary for the national defense. While in modern wars there is hardly any substance that is not useful in the production of warlike implements, the Minister of Supply exercised his powers only over some and their selection seems to bear no relation to their apparent importance in modern war.

### Differing policies for products

WOOL was controlled at the outbreak of the war and its price fixed both for the domestic as well as the imported kind, but cotton was free until 18 months later; steel was controlled but not tin, or rubber, which is so essential for a modern army which marches on wheels.

The fixing of maximum prices followed no uniform plan. Imported wool prices were stabilized at 30 per cent above pre-war levels; they were to remain in force for the duration of the war and for six months after, the Government itself entering the purchasing field. A different policy was adopted for domestic wool. The price of non-ferrous metals bought from British Empire

sources was fixed at the pre-war level—not, as in the case of imported wool, at an arbitrary percentage figure above pre-war rates. Petroleum products were not tied to any set figure but were to be governed at any one time by the prevailing Gulf prices. This is in marked contrast to the method adopted in Germany where maximum prices were uniformly fixed for all products on the basis of those in force in August, 1939.

There has been no semblance of stability in the price of raw materials. The price of basic pig iron, for example, was revised upward six times in the first year of the war, rising from £4:12:6 (roughly \$18.60) a ton on September 22, 1939, to £6:0:6 (\$24.10) on October 29, 1940. Imported raw materials are sensitive, in their prices, to the additional war hazards reflected in increased freight rates, higher war risk insurance or a change in the price in the country of origin. But the unfortunate part is that products of purely domestic origin, although put under control, have in some cases shown even greater price increases than imports. Coal, none of which comes from abroad, is up 34 per cent in price since the war began, cement 21 per cent, while

(Continued on page 83)



People are not buying goods with the extra money they earn. Illustration shows workers' children buying Savings Stamps with pennies that would ordinarily go for luxuries

BRITISH-COMBINE





DEFENSE CONSTRUCTION



AIRCRAFT PRODUCTION



TANK PRODUCTION



SHIPBUILDING

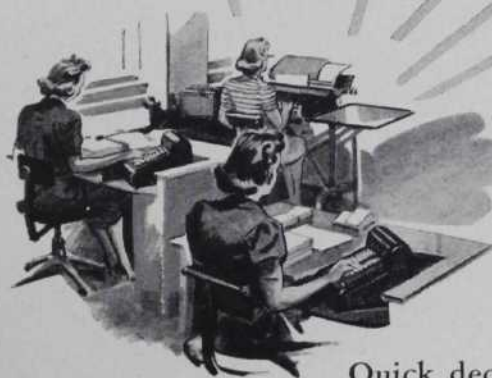
# EVERY DEFENSE ACTIVITY IS GUIDED BY FIGURES!



ORDNANCE PRODUCTION



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In government and defense industries thousands of Burroughs machines are providing essential records and control figures—in less time, with less effort, at less cost.

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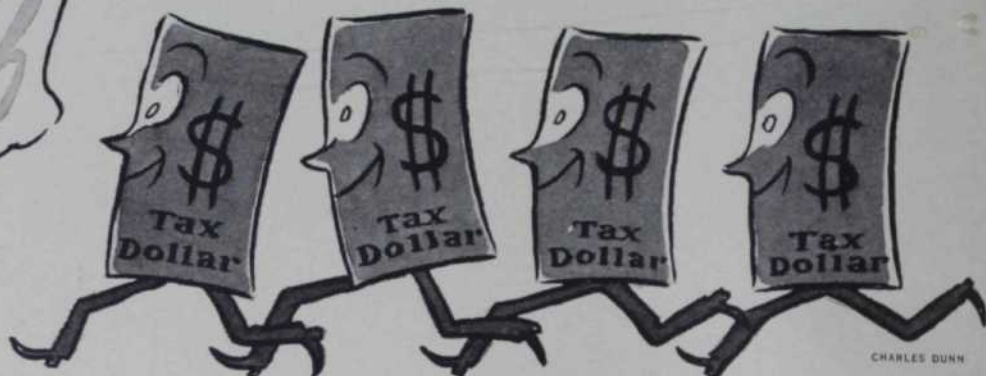
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*Today's*  
**Burroughs**

DOES THE WORK IN LESS TIME • WITH LESS EFFORT • AT LESS COST



ONCE New Jersey tax dollars hired a strip tease performer. They don't any more, thanks to the state Chamber's Governmental Research Bureau



## Light for Dark Tax Corners

By THOMAS WARD MILES

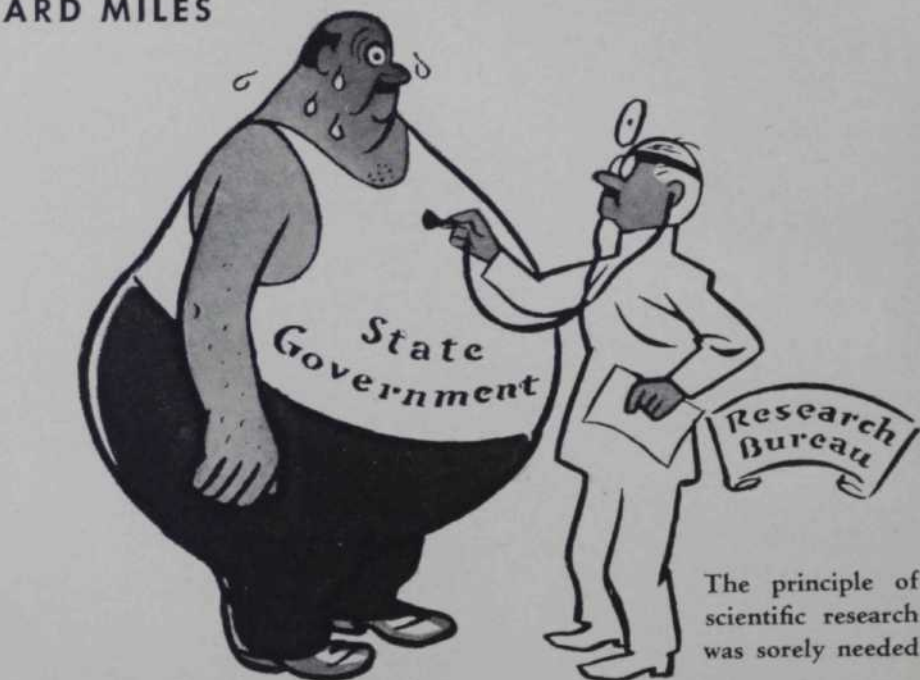
**A**T FOUR o'clock one hot June afternoon a year ago, the Governmental Research Bureau of the New Jersey State Chamber of Commerce received a telegram calling upon it to show where \$1,000,000 could be cut out of the state budget.

The Bureau had been providing the Chamber with ammunition to destroy the political camouflage hiding non-essentials in the budget. The eight-digit figures of the budget had at least \$1,000,000 that could be hewn out of appropriations without cutting salaries or curtailing services. Staff members were convinced of that and said so publicly. Now the Bureau was on the spot.

That telegram, from the chairman of the joint appropriations committee of both houses of the legislature, was virtually an ultimatum to put up or shut up. The Bureau put up.

Staff members went to work immediately. By three the next morning they finished listing the unnecessaries and by 10:30, the deadline, one of them had the answer in the State House at Trenton. The Bureau had not only made good on the challenge but offered to show where another \$1,000,000 lay if given 24 more hours.

Of course all the Bureau's recommendations were not followed. The



legislature refused to go along with some of the suggested cuts, slicing other appropriations instead. Curiously, some of the appropriations reduced by the legislature—unwisely in the Bureau's opinion—had to be supplemented later in the year. Not so with curtailments recommended by the Bureau.

But when the \$39,112,000 appropriations bill was finally passed, it was \$758,000 lighter than it had been. That meant the difference between balance-

ing and not balancing New Jersey's budget.

For 25 years the Bureau, oldest of its kind in the country, has been contributing that kind of service to make democracy efficient and effective in New Jersey. This anniversary year is accordingly significant for tax savings and better government.

The Bureau's story is further proof that active citizens can make democracy work. Governors, legislators, com-



A DILLER A DOLLAR  
A VOLUNTEER SCHOLAR!



HELPING A MAN BUY the kind and amount of life insurance protection he should have, and serving him properly after the sale, are highly specialized responsibilities.

They require on the part of the agent an understanding of people and their problems. They require an appreciation of each individual's present and prospective needs and circumstances.

Today, the needs of millions of policyholders guide the training of every agent. Because this training is in great demand among agents, Metropolitan, for instance, has established training courses to give the agent the benefit of the

lar course is conducted by the management of the District, supervised by the Field Training Division. When this is completed, the new agent works from two to four additional weeks with an



experienced assistant manager who helps him get acquainted with his new duties. After this, continuous training by the District management is supplemented by instruction conferences and courses conducted by members of the Field Training Division.

Most fieldmen have completed the Company's Correspondence Courses; 1255 were actively enrolled in 1940 alone. More than 800 were enrolled in the course which, when completed, brings the coveted designation, "Chartered Life Underwriter," awarded by the American College of Life Underwriters. In addition, Metropolitan constantly issues instructive material for the benefit of all its agents.

Last year, approximately 190 full-time instructors were engaged in carrying on

Metropolitan's educational program in the United States and Canada. An agent's training is never finished. Thousands of agents are striving, year in, year out, to improve their efficiency and ability and increase the value of the services they render you.

It is a fair statement that life insurance agents today are better equipped than ever before to advise with you on all problems connected with your life insurance program.



knowledge the company has accumulated through years of experience and research.

Most prospective Metropolitan agents first attend a training course conducted by a Home Office representative. In localities where this is impractical, a simi-

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—METROPOLITAN LIFE INSURANCE CO.

*This is Number 41 in a series of advertisements designed to give the public a clearer understanding of how a life insurance company operates. Copies of preceding advertisements in this series will be mailed upon request.*

**Metropolitan Life  
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(A MUTUAL COMPANY)

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CHAIRMAN OF THE BOARD

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missions and municipal bodies have solicited its services and adopted its reports.

When the Bureau was formed, it applied to state government, a vast hinterland virtually unknown to the public at the time, the principle of scientific research which the New York Bureau of Municipal Research had used successfully. It was urgently needed.

Taxpayers had begun to realize they had to do more than just beef about taxes—they had to be able to point out particularly what was wrong and where. That meant more work than they could give the subject and led to the development of non-governmental specialists in government.

The Bureau has participated in the reduction of more than \$300,000,000 in New Jersey's public debt, state and local, since 1933 alone. It has helped put more than four-fifths of the state's 568 municipalities on a pay-as-you-go basis; bettered credit standing, curbed public spending, brought a downward trend in property taxes and improved the quality of public service.

Is that worth the \$25,000 it will cost to run the Bureau this year? Well, the Chamber thinks so and the Chamber is made up of almost 1,000 men and corporations who pay \$85,000,000 in taxes of one kind or another in New Jersey every year. Their taxes represent one quarter of the amount spent for state and local government.

To get the facts about pertinent questions of the day the Bureau's staff members go into the field. They even pitch in to work with employees of

state departments on occasion to get a first hand understanding of the job of running a department.

This method frequently produces tips on expenditures that might otherwise be overlooked in the welter of a great state's business. Using these as a lead, Bureau staff members can follow through with investigations and offer suggestions that government officials could not make with impunity.

### Waste of public funds

IN THIS connection a legislator, himself afraid to take the lead, once pointed out the increasing number of \$1,000 appropriations being made within the past few years to veterans and other groups for patriotic celebrations and conventions. These despite a constitutional injunction!

It was almost useless to protest against such appropriations and it would have been politically unwise, to say the least, to oppose them.

The Bureau, its curiosity aroused about how the money was used, did a little checking. The results were amazing.

In the accounting of one was an item of \$65 frankly reported as an expense incurred in lobbying for the appropriation. Another had a \$94 entry for "franks, mustard, rolls, pretzels and beer." A third showed the State of New Jersey paid \$135 for a strip tease artist.

That same year an item of \$1,000 for ear phones for children in the New Jersey School for the Deaf was cut out in

the interest of economy! Since these details were brought out, it has not been quite so difficult to get the Legislature to be more discerning in its patriotism. Only one of the appropriations got by last year.

But not all of the Bureau's problems are so easily solved. Some of its reports, particularly the early ones, look like doctoral theses.

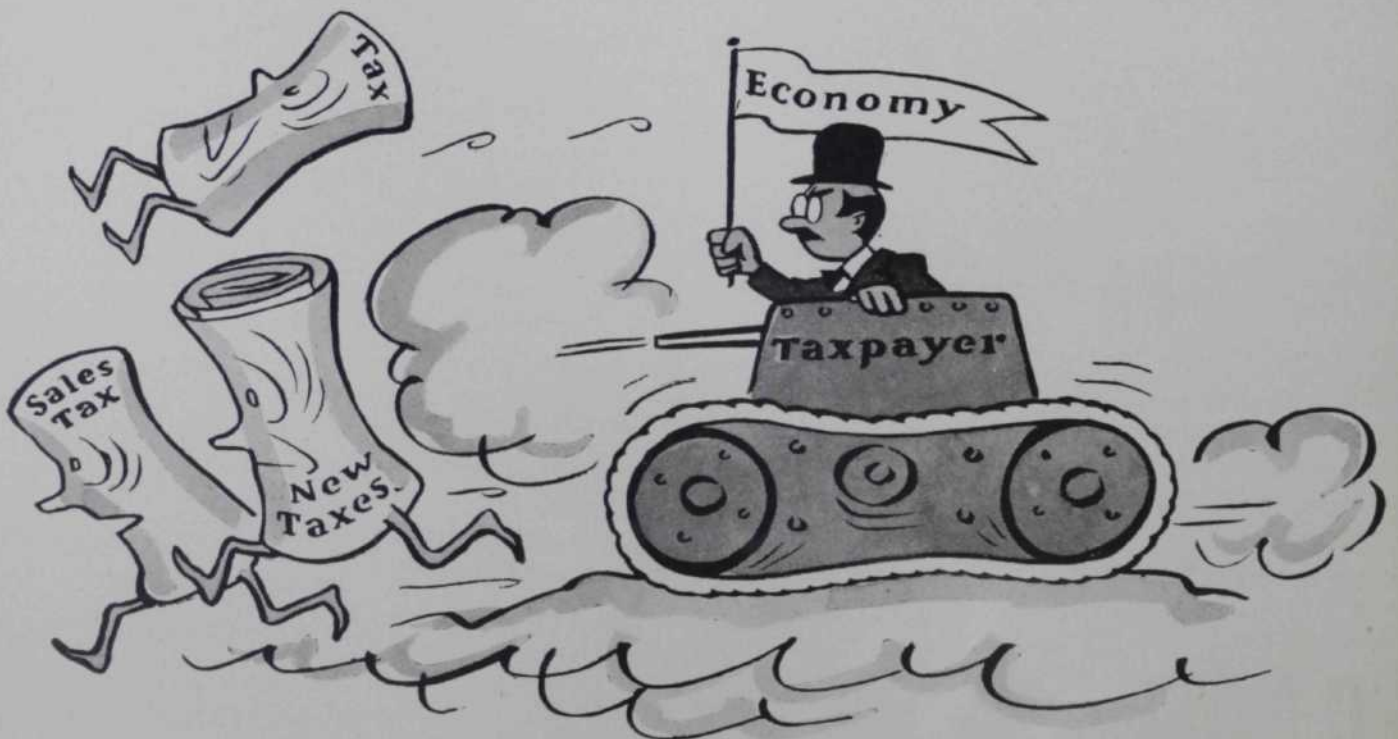
One gotten out in 1916 by Harry Meixell, associate director of the Chamber's staff, on New Jersey's roads, included an exhaustive survey and made far-sighted recommendations for a unified and comprehensive program.

It led to the creation of New Jersey's present state highway system. Meixell's prediction that the state would spend \$200,000,000 on improved roads by 1941, double the amount spent in the preceding 25-year period was considered fantastic. Some editors of responsible newspapers thought Meixell's estimates so visionary they refused to give his report the play it deserved.

Since then New Jersey has spent \$335,000,000 on improved state highways. Last year alone the figure was \$19,000,000.

Another of the Bureau's early "doctorals," one by Dr. Paul Studenski, now professor of economics at New York University, and George S. Buck, national authority on pensions, was directly responsible for the establishment of the teachers' and state employees' pension funds.

Dr. Studenski and Mr. Buck had the  
(Continued on page 75)



Panzer divisions of taxpayers took up the slogan "Economy before new taxes" and blitzkrieged the sales tax. The state still meets its obligations



# "HERE I AM, IN LOVE WITH A MACHINE!"



• "I never realized an adding-calculating machine could be the answer to a maiden's prayer! Maybe it isn't love, exactly — but I do have a crush on that new Model M Comptometer!

• "Well, why not? Together, we turn out figure work in *record time* — addition, subtraction, multiplication, division! And I mean *accurate* figure work — because when I 'fumble' a key stroke (and every operator does that occasionally), the Comptometer's exclusive *Controlled-Key safeguard* locks the keyboard until I've corrected the error!

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• "The Boss says that he knows now that those Comptometer ads he's been reading are right, when they say the Comptometer handles *more figure work in less time at lower cost!*"

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# COMPTOMETER

REG. U. S. PAT. OFF.

## ADDING-CALCULATING MACHINES





# The Substitute is "Batter Up!"

By H. E. HOWE

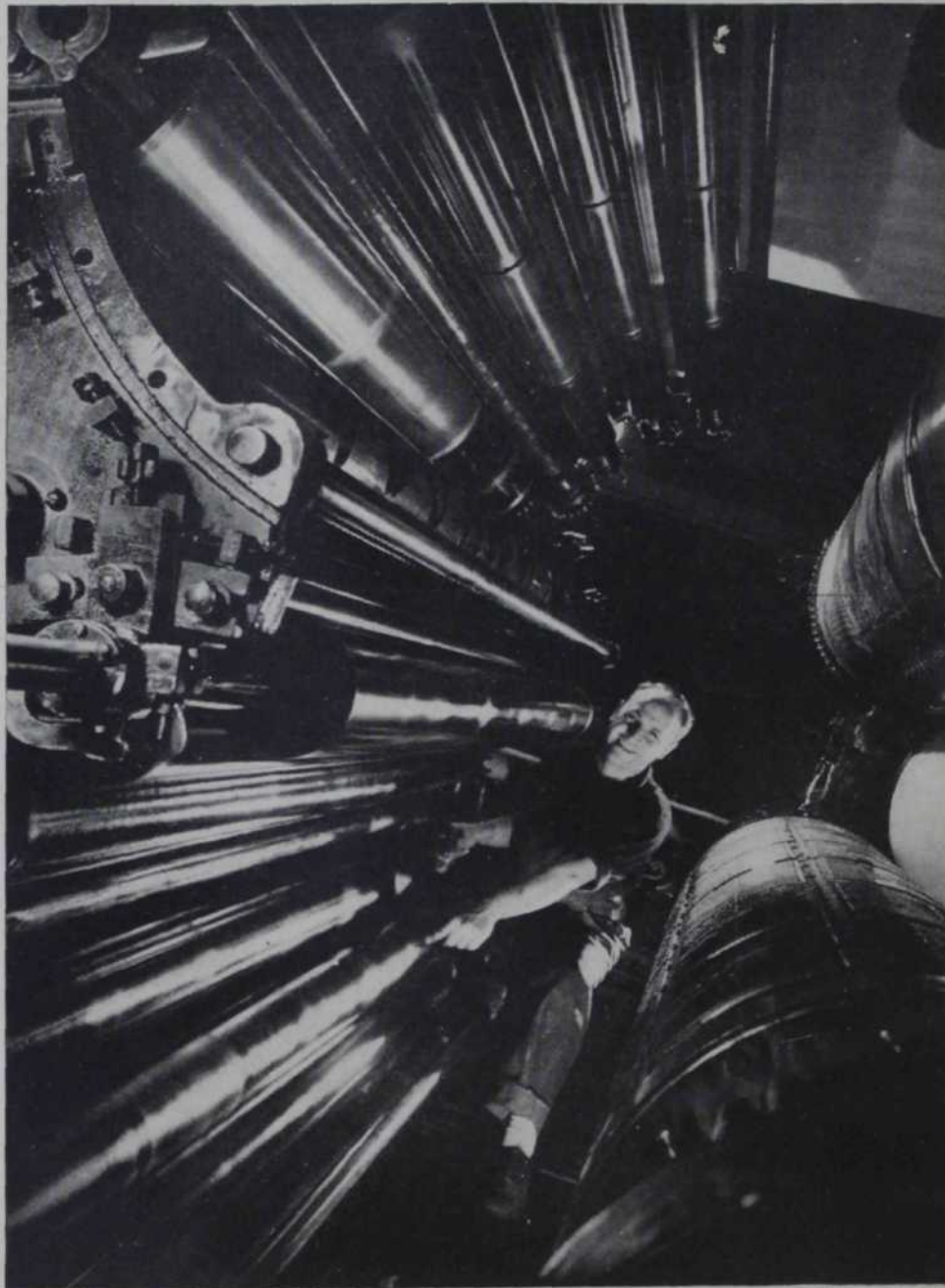
**CHEMISTS** say that the substitutes are adequate—in many cases even superior to the materials which they will displace in home and factory

**P**ROGRESSIVE as American manufacturers are, it is well known that it is difficult to persuade many of them to change procedures. This is particularly true with raw materials for well established lines. Things that have been found satisfactory are likely to be retained, sometimes well after they should have been discarded for something new and better. Many products have been designed and based on materials thought to be inexhaustible or at least abundant at a reasonable price; and so they still are for a normal or even sharply increased demand, but the goods needed for national defense add up to an almost incomprehensible sum. We soon find shortages in all directions—shortages we never dreamed could occur. There is even a shortage of water for several hydroelectric plants.

Defense of course must come first. We are therefore obliged to seek substitute raw and semimanufactured materials for nondefense items, and may even be required to redesign some defense materials. Some of us become a little panicky. We almost wonder if we should close up shop. Others recognize the new situation as a challenge to ingenuity.

Many manufacturers continually give thought to what is second best for them. These are usually those who maintain research laboratories which continually seek new and better things, and thus have some insurance against surprise. What are some of the problems and possible answers?

In the metal-using field it has been natural to fall back from one to another in the list of well known materials. Thus something that had been made in aluminum could be quickly redesigned for production in cast iron, steel stamping, or enamel ware.



ROBERT YARNALL BICHIE

These printing press rollers are made of neoprene, a rubberlike material which is more satisfactory than actual rubber for some purposes

In most cases the substitute performed satisfactory service, but as the defense effort gains momentum and still greater demands are made upon raw materials, other things sometimes must be found to replace the substitute, which itself has taken a place on the critical list of the Army and Navy Munitions Board or has come under the

general metals order. Manufacturers have had to fall back from substitute materials to alternates, which are quite different from those that have been employed and usually have required some change in the manufacturing method. To be sure, new materials are given every consideration and, in a progressive plant, this is most likely to be a



## Never too busy to be Good Neighbors

**T**HERE are a lot of workers in the Bell System — about 350,000 of them. That's a big family and it likes to be a friendly kind of family.

Whether it be the installer in the house, the people in our offices, the operators or the line-man on the roadside helping to rescue a stray kitten for a worried youngster, telephone workers are close to the public and the tradition of the job is helpfulness.

Even in these days when the needs of defense place sudden and increasing demands on telephone workers, they are never too busy to be good neighbors.



### Bell Telephone System

*"The Telephone Hour" is broadcast every Monday. (N.B.C. Red Network, 8 P.M., Eastern Daylight Saving Time.)*







H. ARMSTRONG ROBERTS

Many plastics now used for costume jewelry will find more important employment in the defense program.

re-examination of what may be suitable, following an earlier choice in which possibilities had been thoroughly canvassed.

### Synthetics in many new uses

JUST as in other countries faced with the same problem, considerable reliance is being placed upon synthetic resins and plastics, which now find service in the form of molded products, adhesives, fibers, and coatings. Even here the way is not particularly easy, although fortunately we have many plastics from which to choose. These in turn are made from a considerable variety of raw materials; otherwise we would at once be in difficulty. As it is, in the phenol-formaldehyde type of plastic, the demand even now exceeds the supply because of the scarcity of raw materials. One of these—formaldehyde—is made from methyl alcohol, which has a large and steady demand for use as a methylating agent in chemical manufacture and as an antifreeze for automobile radiators. The methyl alcohol in turn is derived by the distillation of hard wood and by a synthetic process, using the same type of equipment as that in

which atmospheric nitrogen is fixed as ammonia.

The greatly increased demand for fixed nitrogen as a necessary element in munitions does not really permit the transfer of equipment for the production of more methanol. More than likely, the methanol production suffers in favor of ammonia.

If we turn to the glyptals we have a resin involving the use of phthalic anhydride, made from naphthalene, which must be recovered from coal tar. Steps have been taken to increase the output of this chemical of a grade satisfactory for the phthalic anhydride production.

There is no doubt that plastics will be found especially useful to meet the needs of the substitute hunters, and recent careful analysis of automobile requirements, where plastics are by no means new, showed 245 different parts now made of metal which apparently could be made equally well from molded plastics. Six hundred bomber parts were studied for possible replacement of metal by substitutes and 34 were found practicable for substitution, with an additional 82 recommended for further consideration.

Synthetic resins in coatings, where

the lack of drying oils ordinarily imported is being felt, have been found not only feasible but an improvement in some instances. In the adhesive field, particularly in the manufacture of plywood, the synthetic resin has long since demonstrated its good points. The problem today is largely one of supply. In fact, resins have been found so useful for the replacement of metals, both light and heavy, depending upon the use, that steps have been taken to confine them to defense and the more important civilian uses, with corresponding limitations placed on nonessential and luxury items. Just as an automobile, a refrigerator, or a dinette table top does not require some of its metal trim, so it is thought that costume jewelry, baby rattles, and various ornaments need not be molded from highly colored plastics, the base materials for which find a more important employment in the defense program.

### Resins are of many types

IT MAY be well to recall that nylon, vinyon, and vinylidene chloride are, in fact, types of synthetic resins, which lend themselves to fibrous forms among others and serve admirably to take the place of such imported fibers as silk. They are true substitutes in the proper sense of the word, but are also new materials with a waiting market, thanks to their superior qualities.

In the natural course of industrial development several processes have been developed to give wool-like qualities to chemical fibers. Permanent crimping is one of the favorite methods to achieve this end. This applies particularly to nylon and to some of the cellulose acetate fibers.

Another newly developed use of nylon is in the manufacture of bearings which are said to require no oil for lubrication, to offer less friction to rotating shafts and to carry heavier loads than the conventional bronze, babbitt metal or brass bearings. Among the advantages claimed for the new bearing in a recently issued patent are quietness, freedom from vibration, electrical insulation qualities, non-corrosion, long wear and heat resistance.

Although the use of synthetic resins in bearings is not new, heretofore they have required reinforcement with a fabric or fiber filler and required lubrication, usually with water.

In addition to the metals, there are several groups of products for which substitutes are difficult to find. It is not easy, for instance, to synthesize some of the complex hard waxes like carnauba wax. True, we have a new line of synthetic waxes, but they are water-soluble and that imposes some limitations on satisfactory use.

In time we can no doubt discover where and how best to grow some of the



"SMOOTH  
AS  
STILL WATER"



# Levelcoat\* PRINTING PAPERS

Providing all the beauty of costly printing papers at the price of ordinary paper!

## Trufect\* Levelcoat Paper

Made super-smooth by new, exclusive coating processes. For high-quality printing.

## Kimfect\* Levelcoat Paper

Companion to Trufect at lower cost. For use where quality remains a factor, but less exacting printed results demanded.

## Multifect\* Levelcoat Paper

Where economy counts in volume printing, this grade does a splendid job.

\*TRADE MARK

By using *Levelcoat*\* papers you give printed pieces a real chance to do a selling job. *Levelcoat* is manufactured by new, exclusive coating processes which make the printing surfaces super-smooth—put snap and contrast into halftones...bring out vitality in colors...make type appear sharper and more defined. *Levelcoat* users praise the fine printing results obtained.

But more! *Levelcoat* papers provide all the beauty of costly printing papers *at the price of ordinary paper*. Advertisers who have been paying a premium price for superior printing results can now achieve important

savings, *without sacrificing quality*, by specifying *Levelcoat* papers.

Also, in cases where a small printing budget has limited you to not-so-good appearing catalogs, circulars and brochures, you now can step-up to *Levelcoat* quality paper at little, if any, extra cost.

**Seeing is believing . . .** Call your printer or paper merchant now for *Levelcoat* samples. Or write Kimberly-Clark for proofs of printed results. You'll agree, these new papers do most for the money! They are available through your paper merchant. If you prefer, inquire direct.

**KIMBERLY-CLARK CORPORATION • NEENAH, WISCONSIN**

**Established 1872**

NEW YORK—122 East 42nd Street

CHICAGO—8 South Michigan Avenue

LOS ANGELES—510 West Sixth Street



herbs and plants known to the drug trade as "botanicals" and long established in the field of pharmacy. But this takes time and we only hope that our store, which in some cases is known to be adequate, will withstand the demand until a way out can be found. Several promising experiments with the production of drug plants are going on. The last war demonstrated that many of these important "botanicals" could be grown here but, when the products of other lands where they could be grown more cheaply again became available, our projects unfortunately were abandoned.

To a considerable degree the production of synthetic rubberlike materials in the United States is not a part of this discussion, primarily because the materials were being made and sold on their merits in increasing quantities before the present war. This is because they will do some things much better than rubber can do them.

However, in addition to these virtues, these elastomers can be used for tires and similar ordinary applications of natural gum. In that sense they are part of our picture and the construction of large plants is of direct concern

as insurance against possible shortage of crude rubber. It has been estimated that an outlay of \$200,000,000 would provide plants which could make 300,000 tons of synthetic rubber annually. Those authorized or building are of much smaller capacity but, if we are to engage upon a synthetic rubber program, this procedure of trying it out first on a small scale is the wisest.

Substitutes are likely to appear in unexpected places, but there is no reason to believe that lowered quality will result. There may be cases where weight will be added, almost certainly somewhat higher costs may be involved, but not great enough to interfere. The important thing is to maintain lines that have been available, particularly if the products render such service as to entitle them to be known as essential.

There is every reason to believe that, before long, many more materials will be under control than at present, and that substitution of alternates and new materials for what we now know will become so general that it will not be news. Some sacrifices will need to be made, but these are unimportant when compared with what has already been

done elsewhere and with what we ourselves are capable of doing.

It is important to remember that ingenuity can keep the shelves stocked with useful goods to perform all the necessary services. We may not obtain exactly what we are accustomed to. Prices are likely to be higher for what we do get, but there is no prospect of walking into a store and finding most of the shelves empty. The challenge to ingenuity will certainly result in our finding something to meet our requirements and, as a result, much is likely to be learned that will serve after the emergency is past.

One of the things gained in the first World War was a new synthetic organic chemical industry in the United States. From the present conflict we may learn of splendid new techniques, perhaps less-power-consuming operations, new uses for materials that have been somewhat neglected . . . which themselves may prolong the current availability of numerous raw materials.

We will change our ways, no doubt, but certainly some of the changes will be for the better, and new industries may arise to support those which most certainly will be kept going.



BUREAU OF PLANT INDUSTRY

In 1938 we imported \$2,490,000 worth of pyrethrum flowers for insecticides. Photo shows experimental harvester developed by Agriculture Dept. to encourage development of pyrethrum crop in this country. Plant will grow almost anywhere, but hand labor harvesting is impractical





“**F**OR WANT OF A NAIL THE SHOE WAS LOST...”

## OR WANT OF A NAIL THE SHOE WAS LOST...

As Defense production gains momentum, the lesson of the lost horseshoe takes on greater significance. Lack of thorough precaution in seemingly minor matters exacts severe penalties in delayed results.

Every detail in directing and handling production must be protected by the use of methods which guard against delays, mistakes and waste.

Addressograph, Multigraph and Multilith methods, by providing greater speed and accuracy in many office and factory operations, assure

the accomplishment of desired results. These methods, continuously developed for better service to business during nearly half a century, are proving of greater importance than ever in this period of National Emergency.

**TO USERS OF OUR PRODUCTS:** The services of our methods department and trained field personnel are available to assist you in extending the use of your present equipment and broadening its effectiveness. Take full advantage of these services.

### ADDRESSOGRAPH-MULTIGRAPH- MULTILITH METHODS HELP TO:

- Conserve Productive Hours
- Improve Payroll Procedures
- Speed Up Order Handling
- Simplify Purchasing Routine
- Provide Accurate Instructions
- Speed Out Communications
- Eliminate Errors in Routine
- Safeguard Investment in Materials
- Simplify Record Keeping
- Simplify Preparation of Reports
- Control Machine Maintenance
- Safeguard Capital Asset Records
- Lower Operating Costs

**ADDRESSOGRAPH-MULTIGRAPH CORPORATION**  
Cleveland, Ohio

SHOULDER TO SHOULDER WITH YOU IN AMERICA'S DEFENSE



# Two shoulders *to the same wheel*

When you buy a General Motors car there are several things you may take for granted.

It is a good piece of engineering, well-designed and well-made. It is a good value for the money. It will keep running years on end. When you are done with it, it finds a ready market.

These are only highlights, yet even these call for far more than General Motors research and manufacturing resources, essential as they are.

They involve the skilled collaboration of some 18,000 local businessmen, General Motors dealers, whose job it is to bring our cars to market and serve the customers who buy them.

Without such collaboration volume would be less and prices higher, in vicious spiral; research impeded; reliable repair and maintenance service hard to find; your used car a drug on the market.

Under such handicaps the automobile would never have grown to be the serviceable instrument of transportation for millions that it is today.

That is why we say that in the endeavor to give you greater value and greater satisfaction from your automobile dollars, General Motors dealers put their shoulders to the same wheel with ours.

That is why we call them partners in progress with GM, and with the communities in which they live.

**GENERAL MOTORS**

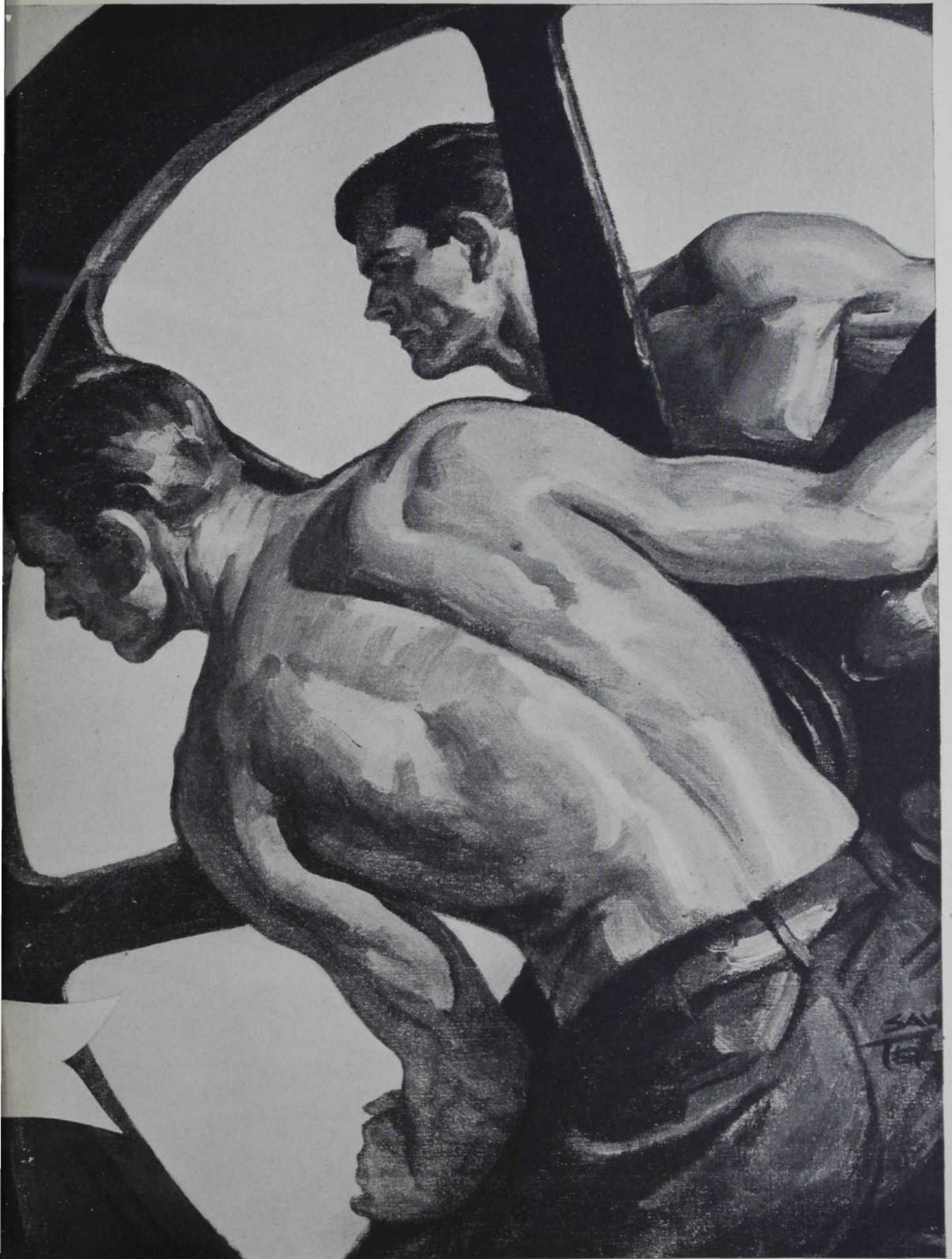
GENERAL  
MOTORS

GENERAL  
MOTORS  
DEALERS

*Partners*  
*in*  
**PROGRESS**  
*through*  
**SERVICE**

CHEVROLET · PONTIAC · OLDSMOBILE  
BUICK · CADILLAC







## HOW THIS SERVICE HELPS EMPLOYEES WHO NEED LOANS

**D**OES your company have to turn down requests for advances against wages—at least above a certain size? Do your employees sometimes need a place where they can readily borrow \$100 or \$200 to meet emergencies?

### Loans for workers

To supply cash credit for working men and women is the job of the family finance company like Household Finance. Here the responsible worker can get cash without endorsers and without signing a wage assignment. The simple transaction is regulated by law. This law is a borrower's law based on the recommendations of social scientists and other impartial students of the small loan problem.

During the past year Household Finance loans have helped over half a million men and women to pay medical expenses, keep insurance in force, clean up old debts and maintain family living standards.

### What borrowers pay

Borrowers repay their loans in small monthly installments. The table below shows sample repayment schedules. Installments include charges at the rate of  $2\frac{1}{4}\%$  per month (less in many territories on larger loans). Household's charges are substantially below the maximum established by the Small Loan Laws of most states. Borrowers pay charges only for the actual time they have the money. They may repay in full at any time.

### WHAT BORROWER GETS

	WHAT BORROWER REPAYS MONTHLY				
	2 payments	6 payments	12 payments	16 payments	20 payments
\$ 20	\$ 10.38	\$ 3.63	\$ 1.95		
50	25.94	9.08	4.87		
100	51.88	18.15	9.75	\$ 7.66	\$ 6.41
150	77.82	27.23	14.62	11.49	9.62
200	103.77	36.31	19.50	15.32	12.83
250	129.71	45.39	24.37	19.15	16.04
300	155.65	54.46	29.25	22.98	19.24

Above payments include charges of  $2\frac{1}{4}\%$  per month and based on prompt payment are in effect in seven states. Due to local conditions, rates elsewhere vary slightly.

Household's staff of home economists gives borrowers practical assistance in budgeting and buying—helps families to become better managers and wiser buyers. Many schools and colleges use as texts Household's helpful booklets on money management and buymanship.

If you employ or supervise men, you are invited to send the coupon for further information. You will be under no obligation.

## HOUSEHOLD FINANCE

*Corporation*  
ESTABLISHED 1878

Headquarters: 919 N. Michigan Ave., Chicago  
One of America's leading family finance organizations, with 297 branches in 196 cities

HOUSEHOLD FINANCE CORPORATION, Dept. NB-9  
919 N. Michigan Ave., Chicago, Ill.

Please tell me more about your loan service for wage earners—without obligation.

Name.....

Address.....

City.....State.....

## It Can't Be Done? It Was!

By MARGARET EAKIN

**T**HE owner of a small Oklahoma plant sat at home dreaming about the big government contracts. Within a few seconds, his telephone rang and he had one! He didn't have the machinery, he lacked materials, and the Government had already commandeered 90 per cent of what he had to have. Could he deliver the contract in five days? It couldn't be done? It was done!

The Army awarded a contract to the Century Mill & Lumber Company at Tecumseh, Okla., one Tuesday with the specification that 950 screen doors had to be delivered the next Saturday to a town 250 miles from the mill. The remainder of the 3,500 doors were to be turned over to the Government a few days after that.

A telephone call to Memphis bought four carloads of cypress lumber. The lumber was to be loaded that day and turned over to the railroad that evening. In 36 hours the lumber was on the spot. Cypress was used because it could be found nearer Tecumseh than the usual white pine.

Another telephone call to the American Steel and Iron Works at Pittsburgh threatened to halt the entire

delivery. The Milling Company wanted to buy grills for the doors. These grills were about 24 inches wide, 30 inches high and were to be made of number nine wire with crosses that had to be welded four places on each square. These went on the bottom of the screen doors.

The Pittsburgh company could make delivery in six weeks at the cost of 51 cents per grill.

"Six weeks? Why that's impossible," shouted Honaker. "I have to deliver 1,000 screens by Saturday."

"Sorry, Mr. Honaker, but that is about record time now with the present shortage of materials," the man added.

What to do? Honaker called a Los Angeles manufacturer of electric spot welders. He would buy a spot welder and make the grills himself. Could the company sell him a welder?

"Yes, indeed," the company official replied. "We have a welder that sells for \$1200.00 and we can ship it to you in about three weeks."

That was late Tuesday afternoon. Honaker took off his coat and went into his plant. Within 26 hours an elec-



"Every time I get it to the surface it starts shelling us"



tric spot welder had been built. It was crude but it worked. Jigs to hold the wire in the right place were also hand made in the same length of time.

Number nine wire was ordered from a city 40 miles away. Meanwhile a cutting machine was built since none could be purchased. So was a stretching machine and a small furnace. A vat was made and the men were ready to galvanize these grills.

#### Information put to use

HONAKER telephoned the University of Oklahoma. "Get me the chemistry engineer."

"How in the world do you galvanize?" he asked the chemistry professor. "I have to know immediately."

The professor told him, explaining, among other things, that the most important thing in galvanizing was zinc.

Smelters in Oklahoma were contacted but the War Department had already taken the entire output. In 90 days, several smelters could accommodate him, but not now.

Time for delivery was drawing nearer. Honaker ordered his engineer to the junk yard to buy all the old fruit jar lids they had. He remembered that the lids contained zinc.

Three carloads were moved from the junk yard to the mill. The market price of zinc was  $7\frac{1}{2}$  cents a pound. The melted jar lids lowered the price for Honaker to six cents.

The lids were put into the vat and melted and the galvanizing plant went to work.

Five employees were put to galvanizing. In a short time, 1,000 doors were ready for the grills. These grills were placed on the screen doors, one every thirty seconds. More than 1,600,000 welds were made. The screens moved along from one employee to another, passing through 21 different machines.

Friday morning, one day early, 1,000 screen doors were delivered.

The grills were made at a cost of 21 cents. Net labor cost was 18 cents.

Dozens of the 2,042 townspeople, hearing of Honaker's difficulties offered their services. When the welding process was underway, interested citizens rushed to the plant to see the "mass" production. Even a congressman witnessed the operation of the home-made machinery.

"Washington is calling you, Mr. Honaker," a messenger shouted a few days later.

"You say the screen doors were fine?" Honaker repeated. "Well, I'm happy. No, we didn't have any trouble getting them out," he told the government official. "You bet we would be glad to turn out any amount."

Nine additional orders have been placed with the company and all nine have been delivered on time.

## ANNOUNCING VICTOR'S NEWEST AID TO PRODUCTION



### 10-KEY PORTABLE SUBTRACTOR

**\$79<sup>50</sup>**

Uncork those "figure bottlenecks" with Victor's latest . . . a 10-key full-duty portable that adds, subtracts, multiplies!

A beauty! With every good point of its famous full-key-board teammate—direct subtraction, automatic space-up, repeat subtraction, automatic punctuation. Same standout economy. Same keen engineering and precision workmanship. Same alert readiness . . . "where you need it, when you need it" . . . to answer today's urgent call in every business.

Phone your Victor dealer today for a demonstration of this remarkable new 10-key adding machine. And ask him about Victor "straight" portable adders, also in 10-key or full keyboard, at only \$49.50, and Victor standard electrics, starting at \$134.50. For further facts write Victor Adding Machine Company, Dept. N-9, 3900 North Rockwell Street, Chicago.

## VICTOR ADDING MACHINES



## ... Would Raise His Stature

"O WING TO the extensive use of machinery and to division of labor, the work . . . has lost . . . all charm for the workman."

That was the complaint of Karl Marx at his complaining best. This country didn't believe it. Instead, it developed mass production methods under which the solitary worker might have the use of \$5,000 or \$10,000—in the petroleum industry, \$40,000—worth of tools with no investment of his own except the willingness to learn to use them. So equipped, the American worker was able to produce more than any worker anywhere.

Today we are being told that the American way is wrong. We are told, for instance, that "production should be for use, not for profit." Such a view ignores, either ignorantly or maliciously, that production and profit, if not the same thing are at least inseparable.

It ignores further that production for profit must be production for use since, unless the goods produced are used, there can be no profit—and, with us, profit has been the big idea: profit for the owner of the tools, profit for the worker and profit for the user. It was not always a money profit. Sometimes it was a profit in leisure, in health, in labor saving, in comfort, in convenience.

Other countries have experienced production for use and not for profit. They have found that it means only production for the use of the few who also take the profit.

Two coolies, propping a log on an extemporized support and attacking it with a hand saw, are producing for use. Somebody who wants to enjoy the use of the resulting timbers is paying them a pitifully few cents a day for their efforts.

No one could produce timbers in this way for profit. It is too slow. He who aspires to profits must constantly seek better, faster methods. If these coolies' employer was so inspired, he would need to invest in a power saw so that he could turn out timbers in quantity. Such an investment would raise the stature of his workers to that of mechanics. It would create the need for salesmen, for teamsters, for a dozen other classes of workers. It would be production for the use and profit of all.

If that is wicked, then profit is wicked, but the desires for a fuller life and for the dignity of labor, are also wicked because they are the children of profit.



GENDREAU

"... all charm for the workman"



**H**ALF THE unsolicited manuscripts that come to NATION'S BUSINESS begin by quoting Emerson: "If a man build a better mousetrap, the world will beat a path to his door."

If the manuscript is bought, that sentence is always eliminated. Partly because it is trite. Most especially because it isn't true.

Beating paths to doors is tedious work and mankind avoids tedious work where possible. One reason is laziness; a greater is that behavior patterns are easily formed and hard to break. If grandpa made his own mousetraps, we make our own mouse-traps until somebody takes the trouble to teach us a better or easier way.

In the early days of this country, the man who carried on this laborious instruction was the travelling salesman. Known as a drummer, he was actually an Agent of Discontent, serving two masters; he made the mousetrap user discontented with his old equipment, he carried the buyers' complaints to the mousetrap maker, inspiring the discontent that led to even better products.

Picture of sartorial elegance from pearl gray derby, past imposing gold watch chain, down striped trousers to buttoned shoes, he was the acme of sophistication.

We can laugh at him now.

But, in laughing, we ought to remember that, except for him, today's standards would be less than they are.

It was he who rode the day coaches, drove livery teams through hub-deep mud—and, if you must, spent the night in farmhouses—to carry the message of progress to the byways.

Nobody beats a path through a forest looking for a mousetrap he doesn't know exists. It was the "drummer" who brought news of its existence, who beat down natural opposition to change, who cajoled and pleaded—and, sad to say, lied—better things into the market places.

His type is passing because he is the victim or beneficiary of his own wiles and wares.

Newspapers, national magazines, poster boards, the radio are telling of new things. Snappy sales engineers carry the sales arguments which he used to put across with fellowship and a couple of funny stories.

Modern enterprise has left the gentleman here pictured far behind—largely because of the momentum he gave it; but he deserves a place in American history as well as its folklore. He led a useful life.

## Agent of Discontent . . .



"... of his own wiles and wares . . ."

KEYSTONE



# NO BUSINESS *Can Escape* CHANGE

Business takes blackout conditions as a stimulus to further development of new aids to living

**1 •** FOR street lighting under blackout conditions there has been developed a luminaire shaped like an admiral's hat and a one candlepower argon lamp. Persons may be seen in the dim light but bombers could not see the light. Ultraviolet in the light shows up fluorescent paints.

**2 •** FOR taking pictures under blackout conditions there has been developed a flashbulb with filter coating which stops visible light. Infra-red film is used, otherwise little change is necessary from conventional photographic process.

**3 •** A NEW heating pad is made with slide-fastened removable and washable cover, and non-radio-interfering thermostats calibrated to keep the pad at low, medium, or high heat. The pad itself is waterproof to permit the use of wet packs.

**4 •** AN AUTOMATIC spray machine has now been equipped with electric eye control and used to coat the inside and outside of projectiles in one operation. The action of the guns is controlled so that there is no spray unless a shell is in the holder.

**5 •** A SHOE sole designed to give safe footing on slippery surfaces has now been adapted for industrial footwear. Shoes and boots suitable for various occupations are made with this sole.

**6 •** A NEW automatic electric iron for home use has provision for an adjustable amount of steaming for various fabrics—the steam is not under pressure and may be turned off for dry ironing. Soleplate temperatures are thermostatically controlled. Button nooks facilitate ironing under buttons.

**7 •** A NEW desk model machine for writing checks or receipting bills automatically writes the date or a consecutive number, accumulates the amount, and signs the form with an authorized signature. It can be completely locked to prevent use by an unauthorized person.

**8 •** A NEW indexing and free-wheeling clutch is particularly suited for use as a ratchet for various feed mechanisms. It provides positive control for practically every type of ratcheting operation. Varying adjustments do not alter the feed accuracy.

**9 •** FOR electroplating there are now available copper-oxide rectifier units of 500 ampere capacity with controls that allow adjustments during operation without interrupting the current flow in the tank. The rectifiers can be mounted singly or in groups under the same regulator.

**10 •** FOR brazing or soldering with silver solder there is now an electric brazer. It is a pair of electric heating pliers operating at ten volts and high amperage obtained from a transformer. The whole unit is arranged for easy use in a compact cabinet on casters.

**11 •** A SYNTHETIC corrosion resistant finish is now made which is said to replace zinc in galvanizing and to give better corrosion resistance on steel than galvanizing when exposed to either caustic or acid.

**12 •** A NEW type sanding machine uses a narrow band of paper threaded over wheels like a band saw. It works in narrow spaces not accessible to an ordinary sander and the loop may be taken off and rethreaded for sanding inside surfaces.

**13 •** A 10 KEY portable adding machine is now made with direct subtraction. It has a listing capacity of six columns and

totalling capacity of seven. It has provision for pencil notations on the tape.

**14 •** A RUBBER of cellular construction is now made that does not absorb water, is lighter than cork. It is used for life-saving belts, floats, and rafts.

**15 •** FOR stamp collectors or other hobbyists or work requiring close reading there is now made a binocular loupe to magnify objects and relax straining eye muscles.

**16 •** A LINE of metal tables formerly with aluminum trim is now made with plastic trim in a variety of colors. The new trim will not rub off on clothing, is easier to keep clean.

**17 •** A NEW synchronizer for flash photography has a compact solenoid release and maintains its synchronism through a longer period of battery life thus avoiding much routine checking of synchronization.

**18 •** FOR photographers there are now available color-corrected flash bulbs. They may be used to light shadows in daylight or for night scenes with daylight color film.

**19 •** FOR convenient filing of drills a cylindrical case five inches high is made to hold drills from No. 1 to No. 60, each in a separate compartment with any drill instantly available by turning the knurled top.

**20 •** FOR refrigerator cars there is now an electric system designed to maintain uniform predetermined temperatures. To cool, air from the ice bunkers is circulated; to warm, electric heating elements are used.

—W. L. HAMMER



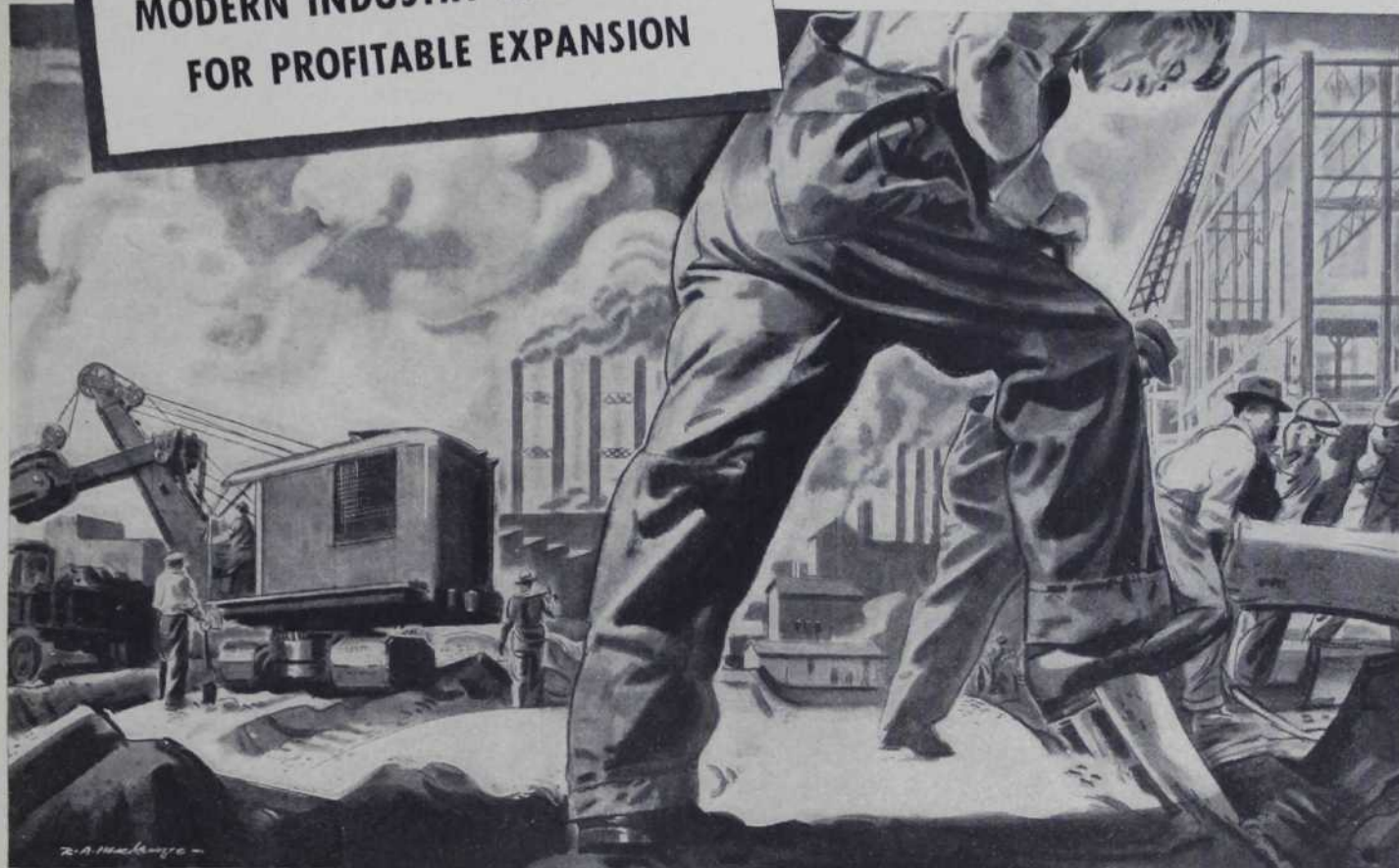
**21 •** A PLASTIC for sink and shelf edgings is now made which can replace metal strips. It is washable, durable, easy to apply, has a non-corrosive finish and can be made in any color which cannot chip, peel or wear off.

EDITOR'S NOTE—This material is gathered from the many sources to which NATION'S BUSINESS has access and from the flow of business news into our offices in Washington. Further information on any of these items can be had by writing us.



*Where pioneers sought "elbow room"...*

**TODAY  
MODERN INDUSTRY FINDS ROOM  
FOR PROFITABLE EXPANSION**

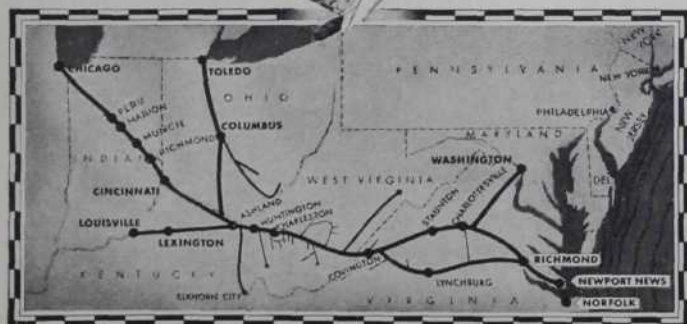


**R**ICH, fertile land and space to grow in...these brought pioneer families westward over the Midland Trail to colonize the wilderness. Today, when the old trail has given way to the great east-west railroad route of Chesapeake and Ohio Lines, industries are on the move to this territory. Treasures of the earth in raw materials for manufacture and power... the produce of farm and forest that industry needs

...an abundance of native-born labor... superior transportation to nearby major markets... plenty of available sites... today these make *The Chessie Corridor* "Industry's Next Great Expansion Area." These advantages — and *still more* — are bringing a great diversity of new industries into this remarkable area, so rich in the needs of modern industry.

Your own business may be one destined to join these swelling ranks. If *The Chessie Corridor* offers what you need, you should learn all the facts — *now* — so that you may plan for the future.

*"Will a cute little kitten be the symbol for Industry's next great expansion area?"*



**Have YOU the book so many executives want?** Information on this important area is now organized and available in a new 56-page book you'll be proud to have in your library — "*The Chessie Corridor—Industry's Next Great Expansion Area*." This beautiful book is a graphic and impartial survey of the resources, conditions and opportunities which beckon industry to *The Corridor*. Copies will be mailed to business executives requesting them from INDUSTRIAL DEVELOPMENT SERVICE, Chesapeake and Ohio Lines, Huntington, W. Va.



**THE CHESSIE CORRIDOR \* Served by CHESAPEAKE and OHIO LINES**





**You show your  
credentials —  
or you don't get in!**

THERE'S no chance for anyone to slip in the back way—no opportunity to sneak blueprints or other valuable material out of the plant without approval—when the plant is enclosed with U.S.S. Cyclone Fence. Day and night Cyclone protects your plant from saboteurs, marauders and thieves. It stops trouble before it begins.

Today thousands of plants all over the country — vital key plants, such as airplane factories, shipyards, oil refineries — are protected with Cyclone Fence. In fact, more plant owners choose Cyclone than any other property protection fence. Does your plant need this protection? If so, call in a Cyclone expert. He'll gladly give you the benefit of his experience — help you decide how best to make your plant and equipment safer. There's no obligation whatsoever.

#### CYCLONE FENCE DIVISION

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## Can Industry Cooperate Legally?

By EDWARD F. HOWREY

THE NATIONAL Defense Program requires concerted action by industry with reference to allocation of orders, curtailment of nonessential production, establishment of priorities and price fixing. These acts necessarily involve the participation of the various Industry Committees now being set up by O.P.M. Such acts, if carried on by private arrangements between competitors, would be violations of the antitrust laws. But, says the Attorney General, if they are performed under the direction of public authority, and designed to promote public interest and not to achieve private ends, then they are not violations.

Thurman Arnold, writing in the *New Republic*, has given similar assurances. He says that the Sherman Act "is aimed only at the private seizure of industrial power"; that it is easy to pool resources, allocate goods or establish maximum prices where defense requires such action; that since a business enterprise in such case is not agreeing with its competitors but merely obeying its government, it runs no risk under the antitrust laws.

Many business men are honestly skeptical about the adequacy of these assurances.

Some of them have recently been forced to stand before a federal judge on arraignment day and plead guilty or not guilty. The occasion for this may have been the doing of the very things the Government now asks them to do again. At least so it may seem.

There is in legal reality, says the Department of Justice, an important difference. In the first instance they acted on their own initiative and for their own private gain. Now, however, public authority will sit around the table with them and take the initiative.

Undoubtedly another reason is that business men are, to put it mildly, afraid of Thurman Arnold. The secret of Mr. Arnold's success—and he has been unbelievably successful in winning antitrust prosecutions—is his method of proceeding by criminal indictment. No man faces serenely a charge that may make his daughter's father a felon and his son's dad a social outcast. Thus the business man has been quick to throw in the towel and trade the indictment for a civil consent decree.

At a recent meeting of one of the

O.P.M. Industry Committees, the official in charge noticed that an important leader of the industry had remained silent all morning. He finally asked him if he had no suggestions to offer. The gentleman replied that his silence was imposed on him by a "so-called consent decree"; that, although he had some definite ideas on the subject under discussion, he did not see how he could express them without the risk of violating one or more of the many broad provisions of that decree.

### Policy of the Department

THE Government recognized some time ago that business men were, as the Department of Justice put it, "justified in expecting that, so far as possible, uncertainties as to the application of antitrust law will be eliminated, when they are asked by the Government to join in a cooperative effort." In an attempt to eliminate such uncertainties, the Department formulated a policy which is set forth in the Attorney General's letter of April 29, 1941, addressed to the General Counsel of O.P.M. This policy or plan is:

Industry Committees may be formed at the request of O.P.M. or O.P.A.C.S. (Mr. Henderson's Office of Price Administration and Civilian Supply).

Any such committee is to be representative of the entire industry and satisfactory to O.P.M. or O.P.A.C.S.

It may give collective advice but any request for action must be made by public authority.

Requests for action in a given field, such as the field of allocation of orders, must first be given general clearance by the Department of Justice.

After the Department has approved the general proposition, then each request for specific action must be made in writing and approved by the General Counsel of O.P.M. or O.P.A.C.S.

Acts done by industry in compliance with such written and approved requests "will not be viewed by the Department of Justice as constituting a violation of the antitrust laws."

In all cases, however, "the Department reserves complete freedom to institute civil actions to enjoin the continuing of acts or practices found not to be in the public interest and persisted in after notice to desist."

The Attorney General's letter does not grant, nor does it purport to grant, an exemption from the antitrust laws. He has not that power. Only Congress which created the Sherman Act can create an exemption from its



operation. The plan does no more than outline a method of building up some evidence to show that competitors were not conspiring to achieve private ends, merely cooperating for the public good.

While this formula might profitably be experimented with in normal times, it is too slow, cumbersome and uncertain for the present emergency. It has left the officials of both O.P.M. and industry confused as to their legal status. This adds immeasurably to the administrative difficulties which already bow the heads and burden the backs of our defense chiefs. O.P.M. must talk to industry every day on the telephone and across the table. Every hour brings problems.

Does the Department's plan require a written request and formal approval in advance of all telephone calls, conversations and memoranda dealing with such cooperative problems? Some think a literal interpretation of the policy might require just such a course of conduct if one wants to be certain that he is not violating the law. The war, of course, cannot be fought and won under such handicaps.

### Less red tape is required

THE result has been that officials of O.P.M. are in large measure forced to ignore the Department's plan. Most business men are cooperating but at the same time are shivering in their boots.

"Will Mr. Arnold or his successor prosecute us?" they ask.

"We don't know," answers O.P.M., "but we've got to have action nevertheless."

War is not a half-way proposition. If defense requires cooperative action by industry—and both O.P.M. and the Department of Justice say it does—then let us have such action for the duration with no "if's," "but's," written requests, formal approvals or general clearances. Whatever industry does for or in cooperation with O.P.M. or O.P.A.C.S. should be expressly exempted from the operation of the anti-trust laws by statute. There is precedent for this step if precedent be needed. Section 5 of the National Industrial Recovery Act provided that "any code, agreement, or license approved, prescribed, or issued and in effect . . . and any action complying with the provisions thereof . . . shall be exempt from the provisions of the antitrust laws of the United States."

The Government now says again, as it did in the Code days, "concerted action by industry is necessary."

But, and it is a large "but," Government fails to remove as it did then the fear of prosecution under the Sherman Act.



### ... and Smith walked away with the order!

Jones might have had a better proposition than Smith—but you can't sell when you're not there!

So the moral is, when you've got an important appointment in a distant city—take Pennsylvania Railroad's All-Weather Fleet. Come rain, come hail, come snow, come gale—these great trains always go! 365 days a year! And they get you "there" safely, swiftly, comfortably—and economically.

As a matter of fact, you can find no more luxurious means of travel. In Pullmans you enjoy smart modern Lounges

resplendent with murals, mirrors, divans—and such innovations as radio and beverage bars. You retire to a completely self-contained private room of your own (Roomette, Duplex Room, Bedroom, Compartment, Drawing Room, Master Room) . . . or a comfortable Section Sleeper. In Coaches you enjoy restful, adjustable reclining seats.

Finally, for this certainty and luxury of service, you pay little—for FARES ARE LOW. So next time you have occasion to go East or West, remember that appointments don't wait on weather—and take the All-Weather Fleet!



**Privacy that is luxury!** For little more than the cost of a lower berth, you can enjoy a spacious private room of your own—the Roomette. Real bed lowers at night... washing, shaving facilities... wardrobe... private toilet... individual air-conditioning. Reserve one!

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# Washington

## and Your Business



### How Long is "Duration"?

BRASS-HATTED sharpshooters are raising their sights on the war. Best available opinion is that it will run through 1943. This will be nice for us, if we are forced into a shooting war, because we are still short of wooden guns with which to drill our conscripts. Under-Secretary of War Patterson, who is lamentably short of fervor when he operates with the spoken word, says the Army will not be fully equipped before December, 1942. Admitting freely that industry has done a tremendous job and done it well, he says that industry has not begun to hit a satisfactory stride in war production. No one knows how long is a stride. If we are really to be the arsenal for all the "democracies" the only limit will be American stretching power.

### Watch the Dollars Roll in

THIS means, of course, that two boom years are ahead of us. The word "boom" should be read with caution, however. Outlook is that the Government will spend \$20,000,000,000 to \$30,000,000,000 in each boom year, and more if the engineers can find space for the machines and elbow room for the men. But the boom will be as spotty as this year's freckle-champion. Administration tries to cover this particularly bitter cake with oral honey, but in the back room it is admitted that small business is bound to have a small time. The supply of practically everything the housewife wants to buy will be cut short. January of 1943 may find ration cards in operation. Not only will taxes be so high that spending money will be short, but a compulsory savings plan is possible. Congressional leaders say "no." But you've heard about the lady who said she would ne'er consent.

### Two Worries on High Brows

LEADER certainty is that if we do go to war—a shooting war—for strictly American reasons—the

people will take these inconveniences and sacrifices and call for more. Longer hours, fewer dollars, less light, gas by the quart, old clothes, last year's shoes, bare-leg ladies and the like will not evoke one angry peep. But if we do not go to war—the shooting war—the leaders fear our folks will develop a strong Missouri strain. They will want to be shown. The leaders recognize that a few months ago not many of us had ever read the word "ideological." Offhand, it doesn't sound like anything to suffer for.



### Washington's Sounding Board

HIGH opinion is that we will be in the shooting war, somewhere on the sea, not later than November. Equally high opinion is that we may escape it altogether. The fact is that Washington does not precisely know what is going on in the rest of the country.

The surface sentiment is all for intervention and war and glory, and this is aided by 3,000 British officials and employees, at every cocktail party and shindig and glamour house in town, using the pronoun "we" at every angle, and being on the whole the liveliest, most high-powered, old-school-tie crowd that ever invaded us. Washington's hostesses love and admire them, as who wouldn't? But on Capitol Hill there is a fear that they may not speak with the voice of Squirrel Corner and Cut Bank.

### To Change the Tone—

JOHN TABER (R., N. Y.), who has from time to time looked at the seamy side of the W.P.A., is credited with this yarn:

A W.P.A. laborer was leaning on his shovel when a mouse ran over his foot. He said:

"You little so-and-so, if I had another shovel, I'd kill you."

### Deferential Bow to the C.O.'s

MET an officer who had recently been transferred from the C.C.C. to handle a camp in which the Conscientious Objectors are being held.

"Those guys are good," he said. "A C.O. will do in three weeks a job a C.C.C. boy would not finish in two months."



### Maybe It's a Good Sign

EVERY one appears to be dissatisfied with the progress of the defense program. If any one of the pontifical columnists has failed to indicate discontent, the contented one has escaped notice. On Capitol Hill congressmen are saying things openly they would not have said in a closet three months ago. Industrial leaders are furious at the interference of theorists. The theorists bedamn the industrialists because they





*One of a series illustrating Cyanamid's many activities.*

# A Case In Point

Like all boys, Bobby is "inclined to be hard on things," and his bike is no exception. It works a long, hard day... the drive chain in particular. Cogs and links mesh a thousand times in a single jaunt between home and school. You wonder how such a slender, intricate series of little links and rolls can possibly withstand the incessant drag weight and friction, the ceaseless shock and impact of pumping and braking.

But Bobby's bike does stand up and deliver—even heroically at times. And therein lies the secret of a process that means a great deal to all industry. This is the case-hardening process, by which the surface of steel parts is made resistant to wear and tear. It is especially important today because machinery must

"take it" as never before, all along the line... in driving gears, cams, dies and bearings of great power plant equipment... of towering cranes and speeding conveyors, of humming lathes and clattering presses... of trucks, trains, planes and ships that keep the wheels of factory and transportation turning with an uninterrupted flow of production.

Case-hardening compounds such as AEROCASE\* and AEROCARB\* compounds, developed by American Cyanamid Company, give soft, workable steels the durable surface needed by industry for low cost, high speed, continuous operation in vital machine parts. They are part of a complete line of Cyanamid

products for case-hardening and carburizing of steels, and demonstrate another instance of Cyanamid Chemistry at work on the "assembly lines" of industry.

\*Reg. U. S. Pat. Off.



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**TRANSPORTATION  
WILL BE REVOLUTIONIZED  
WHEN  
AMERICA IS ALUMINIZED**

Aluminum's "all-out" expansion for National Defense holds great future promise for all forms of Transportation . . . an abundance of light, strong aluminum at low prices.

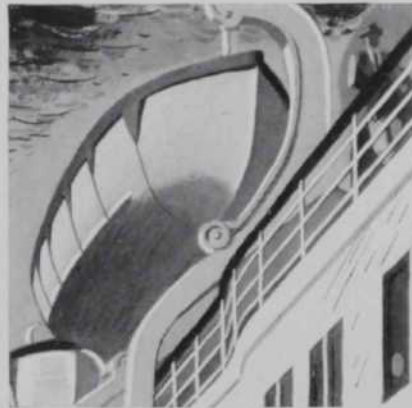
For the one thing above all else that Transportation needs is light weight . . . with strength and corrosion resistance. And the one thing above all else which aluminum provides is light weight . . . with strength and resistance to corrosion.

At this moment, Defense has first call on aluminum. But the entire aluminum industry is making spectacular increases in production facilities. In the near future, this company's production capacity alone will be almost two and a half times what it was in 1939, highest peace-time year in company history.

What will transportation designers do with aluminum when they have this abundance at such favorable prices? The best forecast is to be found in the things they have already done. Here are a few of them:



**BUSES AND TRUCKS**—Buses and trucks must hold down weight to keep up payloads, and to keep under legal weight limits on public highways . . . One company, up near the limit, was unable to put air conditioning systems into its buses until it saved enough weight by making its gas tanks of aluminum and changing its floor system . . . One bus saved three tons with aluminum . . . Another was able to carry 85% greater passenger load . . . 500 pounds of aluminum in a bus replaced 3,000 pounds of other materials and reduced the cost \$470 . . . Insulation of a truck was cut from 2,000 pounds to 30 with aluminum foil.



**SHIPS**—Ship designers know they can in some cases add an entire deck of staterooms by building superstructures, stateroom partitions, and doors of aluminum . . . Lifeboats have been made 1,600 pounds lighter by aluminum and \$60 per year per boat saved in painting costs alone . . . Structural aluminum reduces the vast area of surfaces that need painting and aluminum paint on other surfaces lowers the weight of paint, which amounts to tons on a big vessel . . . Aluminum's non-sparking property makes it invaluable for hoses and spouts which load or unload oil, etc. . . . Ship furniture of aluminum weighs less and cuts fire hazard.



**RAILROADS**—Streamlined aluminum passenger trains have more than justified the predictions of comfort, time-saving and earning capacity. Will American railroads (already providing the world's lowest ton-mile freight rates) streamline their freights? . . . Comparatively small use of aluminum has already cut 10 tons of unnecessary weight from certain locomotives . . . Power output of a Diesel was jumped 85% with aluminum pistons and lighter reciprocating parts . . . Hopper cars with aluminum sides that have served years without noticeable corrosion may end high cost of maintaining coal hopper cars.

#### After Defense

After the crisis is over, after America has all the aluminum anyone can want, you may find one or more of these economic advantages of aluminum invaluable to you:

- Light Weight
- High Resistance to Corrosion
- High Electrical Conductivity
- High Conductivity for Heat
- High Reflectivity for Light and Radiant Heat
- Workability
- Non-magnetic
- Non-toxic
- Strength (in alloys)
- Non-sparking
- Appearance
- High Scrap and Re-use Value

Aluminum's development men are eager to cooperate with you NOW on any problem in which aluminum may work.



**ALUMINUM COMPANY OF AMERICA**

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say "social gains" are being imperilled. Under cover of the first page news from Russia, the labor rajahs have been pulling fresh strikes. The younger officers say the older officers in the Army are trying their best to keep up with German activities, but repress heretical ideas that might be in advance of the Nazis.

The President is blamed because he does not discipline his aides. They speak presumably for the Administration but they do not say the same thing. "Every man a President," to borrow a line from the late Huey. The probable meaning of it all is that the immensity of the defense plus the arsenal job is just dawning on most of those responsible. They are not getting rattled, but they are getting angry with follies and wastes and lack of plan and foresight. Another month may see operations tighten up.

## One of Those Little Rifts

CURRENT opinion is that William S. Knudsen will resign and O.P.M. will be reorganized. He won a fight against Leon Henderson by stopping Henderson's 50 per cent cut of automobile manufacture by appealing to Jesse Jones against whom Henderson had been more or less surreptitiously moving, who called on Tom Connally, his fellow Texan, and the chief of the Senate's Foreign Relations committee. If the Henderson order had gone through as written the industrial disorder would have been tremendous, the economists say.

## Cards Stacked Against Knudsen

KNUDSEN is accepted as an ace production manager, but he did not know what he was up against when he came to Washington. He was not only called on to fight his opposite number in O.P.M., Sidney Hillman of the C.I.O., but to take on Henderson at the same time, with Isador Lubin as bucket-boy. Lubin has five distinct offices now, with a separate job in each office. Back of the trio were the social savers, who did not care what happens to business if they could get their pet ideas over.

A few weeks ago it looked as though O.P.M. would merely fade out, but now it seems probable that the organization will continue and that Knudsen will be under the eaves in a cold rain.

## More Butter And Fewer Guns

R.E.A. is now serving more than 3500 industrial and commercial users of electric current. Many are engaged on phases of the commercial program. This is pleasing to R.E.A., but recently the order has gone out that Britain now needs food more than arms. Therefore R.E.A. is teaching the farmers' wives how to cook. Maybe the instruction isn't needed, but no traveller on dirt roads will complain.

## This Calls for Faith

UNLESS some of the bittering leaders previously referred to have not the guns they think they have, the price-control law will be in effect the Baruch plan of 1918. This was a price ceiling permitting reductions but refusing advances, and covering wages and farm products. It is conceded that the Administration does not want to oppose either labor or the farmers, any more than does the present majority of congressmen, but it is thought that, in October, the inflation will be so widely felt that the pill will be swallowed. No real effort to devise means by which inflation might be fought. But how the talk rages!

## In Case You Want to Know

OF the 3,100 U. S. counties, the census preliminaries show that there are 164 fewer in the "rural" class than ten years ago and 299 more towns had passed the 2,500 population mark and so are classified as urban. On the other hand, there were 12 fewer counties whose population was between 75 per cent and 99.9 per cent urban than in 1930. The conclusion seems to be that people are moving into small towns and to some extent away from the larger cities. All of which might interest any one considering opening a small business, if he can be sure of his priorities for the next two years.

## An Opening for Arnold

UNDER cover of the defense program Thurman Arnold proposes to compel the gasoline companies to do away with the trade names which they have built up by persistently advertising a constantly improving product. Mr. Arnold hopes to carry on his fight against other trade names. Oopsey daisy, Thurman. That's the stuff to feed the troops.



## Fly in the Webs

THE F.C.C. has been swatting at newspaper-radio tie-ups, under the able leadership of Chairman Fly. He indicates that it is not newspaper ownership of a radio station but the monopoly of news facilities in a given area that he objects to. Cynics say that (A) the Administration wants to tighten up its control of the radio and (B) wishes to frighten the newspapers into tame compliance. The Ickes method has been tried and failed. Mr. Ickes is falling back toward the scoured wool page. He tried to seize F.C.C. for Interior but was blocked.

## It's a Test for Jesse

MEANWHILE one of the most formidable bottlenecks, as Chairman Fly calls a local news monopoly, is that possessed by Jesse Jones, Secretary of Commerce, money-lender extraordinary, and Big Brother of all the little congressmen.

Mr. Jones owns all the radios and all the newspapers in his town of Houston. He is detested by most of the Administration's file closers, who think he has too much patronage at his disposal, which is a refined way of saying they want it themselves. The matter will eventually reach Congress. Wise money is on the Jones entry.

## Why Not Gossip a Bit?

HOUSE Ways and Means committee was told the other day that Mrs. Eleanor Roosevelt's income, derived from radio, writing and lecturing, touches \$200,000. Just goes to show that the United States is still the land of opportunity. Walter Winchell tops her with a \$400,000 take, and Raymond Gram Swing is probably in the \$100,000 class. Perhaps that estimate by a radio statistician is too low. Mrs. Roosevelt's newest sponsor is a committee to boost South American coffee. She gets \$2,000 per boost.



## Tonsil-Twanging is Not Enough

FOR some years state offices have been filled with the conviction that if we said loudly enough and often enough that we love all the Latin-Americans they would be willing to ignore economic considerations in their dealings with us. Nelson Rockefeller's sternly realistic Rockefeller training led him to doubt this, and he has now convinced his superiors that Latin-America prefers to trade with us, but not at a loss, that L.-A. thinks maybe we are levelling now but is inclined not to sign any notes in blank, and that it is up to us to develop trade opportunities in the future and quit acting snooty. Rockefeller honestly thinks there is a chance for big business down south, but we've got to go get it.



## How to Annoy a Patriot

ABOUT the only fun he got out of life was to slip away from business now and then for a few days on his yacht.

"Your country needs that yacht," said an Admiral. "We'll give you \$80,000 for it."

"It cost me \$900,000," said the patriot. "But—after all—I only use it for pleasure."

So he let the Government have it. Now the Admiral uses it for pleasure.

## That Was 10 Years Ago

CENSUS BUREAU says South Bend, Ind., has the lowest *per capita* cost of government of any northern city in its class. All because ten years ago the business men steamed up over municipal extravagance and bond issuing and tolerance of cockeyed finance and made a fight for conservatism and honesty. One finds a melancholy pleasure in printing the item.

## Shortages in Basic Materials

A SYSTEMATIC effort is being made to discover what basic materials are not in quantity equal to the demand. The Chamber of Commerce of the U.S. is inquiring of the nearly 6,000 manufacturers in its membership, and a division of the Census Bureau is canvassing 65,000 manufacturers and 15,000 wholesalers. Industrial and labor committees are being set up under O.P.M. to cooperate to the same end. It is accepted as an economic necessity that loss of employment should be avoided if possible at this time, and already some factories have been forced to close down for lack of materials.

## Why Not Have a "Hangar Raisin"?

IF Sheridan, Wyo., had only had an airfield in operation, a unit of the C.A.A. pilot training program could have held a summer session there. But Sheridan had no proper airfield.

So the local chamber of commerce had an old-fashioned hangar raisin'. A hay field was fixed up, the proper buildings erected, every one had a swell time, and the C.A.A. unit came to town. Just an easy way into the fact that of the 113 non-college

pilot training units 52 have been sponsored by chambers of commerce. Best of it is that they have been the most successful.

## Bundles for Business Men

FOREIGN Policy Association notes that every aspect of British economy is controlled and directed by the Government. . . . New methods include "limitation of supplies, wholesale purchase tax, concentration of production, and rationing of clothing." . . . House Ways and Means committee will probably broaden the income tax base in 1942 to take in practically everybody. . . . Plan is to standardize products next year—stockings, bricks, plows, shoes and so on. . . . Local passenger trains will be reduced or eliminated by Christmas. Association of American Railroads has asked southeastern roads to curtail excursion trains. . . . If St. Lawrence Seaway is accepted by Congress it will be because Mr. Roosevelt is in complete control. Nose-counters say Congress does not want it. . . . Neither, apparently, does MacKenzie King, Canada's P.M., nor John L. Lewis of the coal miners. . . . When and if price control becomes a law, lids will be put on hundreds of commodity prices at once. . . . Recent report by Brookings Institution is that we can make ready either for a long war or a short war, but not make ready for both at once. . . . O.P.M.'s demand for more steel capacity points toward long war expectation.



## Don't Worry About Food

PERHAPS a shortage of tomatoes. Not enough cans. There will be plenty of food. . . . Unemployment will increase for a time because factories producing goods for civilians will be forced to shut down. . . . Heaven help the manufacturer who carries too big an inventory. O.P.M. won't. . . . Leaders hope Hopkins will stay in Britain. He made trouble as an administrator and would be asked questions when the new \$7,000,000,000 — or \$12,000,000,000 — lend-lease bill comes up. . . . Congress showing curiosity about intimate details of aid granted Britain.

Unless Roosevelt revokes it appears that F.P.C.'s Chairman Olds has won his fight to coordinate electric utility activities as against Secretary of the Interior Ickes, who wants to rule them. J. O. Krug, former chief engineer of the T.V.A., is to be in charge of the engineering end, and the utilities seem to be pleased. If and when the war ends Germany and its satellite countries will have about 200 billion kwh to put to work in industry, and our kilowatt hours will be about the same. Anticipation of many leaders is that the United States must come down to a lean-waisted, hard-muscled, long-houred plan to compete with the Germans. They think we can lick them. The war, they think, will get rid of a lot of the confusion and nonsense that have previously handicapped us.

*Herbert Corey*



# "Green Labor" on the job

*A big compensation insurance problem of yours*



Pouring into the plants of geared-up America today are youngsters who have never before worked—young men settling at last in steady jobs—middle-aged who have not turned a hand in years.

New to this "green labor" are plant surroundings, machinery, equipment, routine of operations.

Even the U. S. Government, realizing that this unfamiliarity between the new man and his job is responsible for staggering industrial losses each year, is doing something about it.

The Labor Department is asking Congress for a substantial appropriation to set up a special safety service for defense.

Report department officials:

*Over-all defense work is being even more seriously delayed by industrial accidents than by strikes.*

Forty battleships, it is estimated, could have been built with time lost

last year through industrial accidents.

As a practical businessman consider this: a minor phase of an accident in your plant is the cost of medical care and compensation paid by your insurance company.

*Four times greater, on an average, are hidden costs you pay in machine and product damage, loss of skilled services, precious time through personnel adjustments, of stalled operations that lower efficiency, morale and, consequently—profits.*

In the face of this, isn't it good busi-

ness itself to establish in your plant at once a planned safety program?

Lumbermens Safety Engineering Service offers you its staff of highly skilled experts. They'll make a study of your operations—quietly, no interruptions—discuss the findings with you and, if you say the word, plans will be drawn and carried out in detail—at no cost to you.

One of our experts will call at your convenience. There is no obligation whatever. You have all to gain, nothing to lose.

Drop us a line—today.

## Lumbermens

MUTUAL CASUALTY COMPANY

JAMES S. KEMPER, President Home Office: Mutual Insurance Bldg., Chicago  
Operating in New York State as (American) Lumbermens Mutual Casualty Company of Illinois  
Affiliate, American Motorists Insurance Company





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# Much Ado about Prices

The armament boom is steadily forcing food prices up and they will continue to rise for a time, regardless of any price controls the Government may impose, says the National Association of Retail Grocers. Not because of any general food shortage, adds N.A.R.G.U.S.; the rise is occasioned by several factors such as the labor shortage and the cessation of importations from abroad. Retail grocers, distributors and manufacturers are trying to keep prices from rapid spiralling but the situation is not within the control of the food industry.

The very volume of talk decrying price increases attests their inevitability. All sorts of explanations are given but the principal reason seems to be a growing demand caused by greater employment, higher wages and anticipation of inflation ahead. Milk dealers say they must have higher prices. Prices of hogs have been rising steadily since January, 1940, which causes the Department of Agriculture to reverse its policy of pig birth control. The women's underwear industry points to a rise in cotton grey cloths from 4½ cents a yard in June, 1940, to nine cents in June, 1941. Rayon went up 30 per cent in 3½ months, says the same organization.



Clamor by this and that group that some other group is responsible and should have its prices fixed by the Government is a reminder that the pack is no longer in pursuit of the price cutter. There are intimations that the poor old price cutter may not have been such a bad fellow after all; the real villain is the price raiser. As Assistant Attorney General Thurman Arnold says, "We want price cutters; we need price cutters." Emphasis on *minimum* prices fixed by law has changed to *maximum* prices fixed by law. Supply and demand are still concealed in the background but are just as potent as ever.

Price Czar Leon Henderson is busy ordering, requesting, cajoling. He asked bakers not to increase bread prices but managed to ignore the rise of wheat on the boards of trade. Although wages are at the highest point reached in any country at any time, and are continually being revised upward, he requested that no increases should be made on automobiles. The Chrysler Corporation declined to comply and there the affair rested. But Mr. Henderson's real test came when he ordered the entire automobile industry to cut its production by 50 per cent. This raised two major questions. First, was not OPACS trespassing on the authority—if

The OPACS Hercules . . .  
Phone Etiquette . . .  
Flowers for Everybody . . .  
Food or Fad?

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

anyone has such authority—of the Office of Production Management? Second, is the hamstringing of the nation's No. 1 industry sound from the standpoint either of defense or economic well-being?

As fast as the Government establishes a maximum price level on one commodity the demand overflows into some substitute and lifts the price of the substitute. The difficulties in Mr. Henderson's job were mapped by Bernard Baruch in two of the eight principles he laid down for the application of Government-fixed prices. In the first place, said Mr. Baruch, such a plan must embrace every price in the whole national pattern, including rents, wages, interest rates, commissions, fees—"in short, the price for every item and service in commerce." The second requirement is that, if the demand for any item exceeds supply at the price fixed, the Government must assume control of the whole supply and ration it.

The "vitamin fad" is reaching proportions that disturb the grocery trade. "It's a question of a juicy steak and French fried potatoes against pills," says Mrs. R. M. Keifer, secretary-manager of the National Association of Retail Grocers.

In view of the army of Americans on a bland diet, Mrs. Keifer may have made a strategic error in talking about fried potatoes. But grocers who attended the N.A.R.G.U.S. Convention at Chicago expressed strong agreement with her view that the grocery store and not the drug store is headquarters for vitamins for most normal persons who prefer to imbibe them in meat and fruit and vegetables rather than via the capsule method.

"Retailers for Defense" is the theme for National Retail Demonstration Week, September 15 to 20. All retailers are asked

by the sponsor, National Retail Dry Goods Association, to participate by featuring defense displays, institutional ads, local broadcasts and a showing of a sound movie on the retailer's rôle today. National chairman Benjamin H. Namm of Brooklyn lists 14 points as the minimum part that retailers should play in the national armament program. Among them are:

Avoid even the semblance of profiteering. Prevent as far as possible any unwarranted increases in prices of merchandise. Urge upon manufacturers that merchandise be informatively labeled. Eliminate all "scare" advertising which says or implies, "Buy now because prices are rising." Aid in development of substitutes for materials needed in armament. Encourage simplification of merchandise types.

Sampling to expand a market is old strategy but the way florists in Philadelphia have used it is original enough to be suggestive to others.

William A. McGarry writes us of a parade held recently in the Quaker City to open the thirteenth season of Flowers for the Flowerless.

The custom started at the suggestion of Samuel Fleisher, Philadelphia business man and philanthropist, says McGarry. At one of the social functions of the Graphic Sketch Club the patrons had provided a large quantity of flowers. Instead of throwing them away at the conclusion of the function, Fleisher suggested that they be distributed among children in the tenement district. And so Flowers for the Flowerless was formed. Under the leadership of Ruth Strawbridge it enlisted the time and floral contributions of volunteers and garden owners, as well as utilizing floral decorations ordinarily thrown away after a brief use.



At first the florists, particularly retailers, opposed the idea as a raid on their business. But it proved otherwise, to their complete satisfaction. Youngsters who had been "sampled" began to make regular calls for more flowers to take to their adult relatives, to shut-ins and hospital patients. The flowers that otherwise would have been wasted went to people to whom they were a luxury not ordinarily enjoyed. These people were given the flower habit; when and if they reached better circumstances they became customers of the florist shops.

Philadelphia florists such as the S. S. Pennock Company say that the wisdom





**T**O meet the transportation demands of defense and of commerce takes teamwork. Shippers load and unload carload freight, railroads move the cars. Putting one more ton of freight in each carload shipped this year would be the same as putting another 40,000 cars into service.

So let's load cars to the limit—with all the freight they

can hold—or with all the weight they are rated to carry, as shown in the *load limit* stenciled on their sides.

Heavy loading saves not only cars but motive power and fuel as well. It takes a lot less power to pull 50 tons of freight in one car than to pull the same freight divided between two cars.



**T**HAT takes help from shippers, too. Help in never giving a car a chance to loaf. Help in loading and unloading promptly . . . in not holding cars over Sundays or holidays . . . in giving advance notice of car needs . . . in not ordering cars placed for loading till actually needed.

That sort of help from shippers has enabled railroads to meet every transportation demand. With that sort

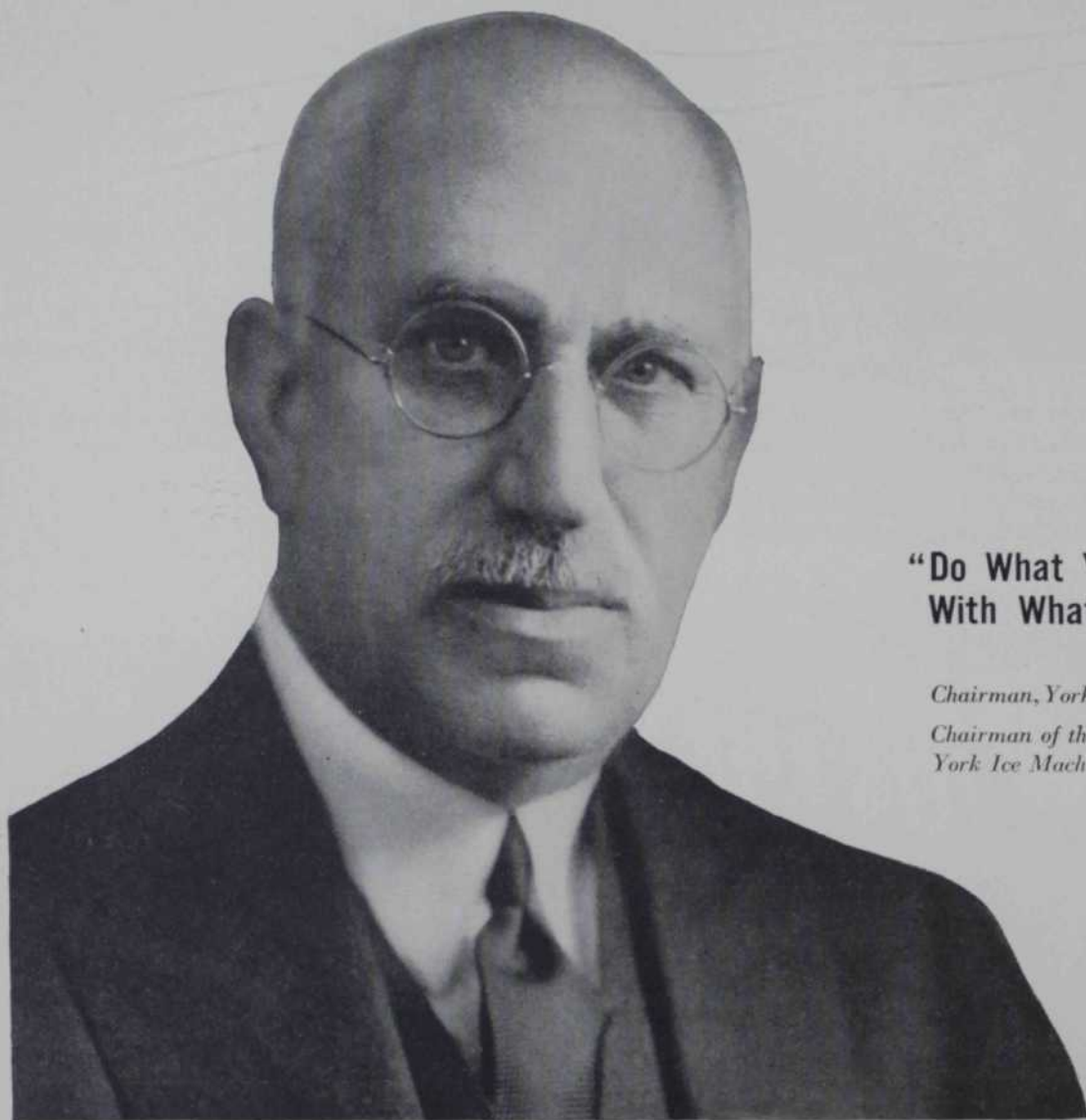
of help they can keep on keeping ahead of a mounting volume of traffic.

The peak load for the year is just ahead. It is more important now than ever before that every railroad man, and every shipper, keep in mind these two simple resolutions:

**LET'S LOAD 'EM UP! LET'S KEEP 'EM ROLLING!**

**ASSOCIATION OF AMERICAN RAILROADS** WASHINGTON, D. C.



FORMULA*For PULLING*

**"Do What You Can  
With What You Have"**

WILLIAM S. SHIPLEY,

*Chairman, York Defense Committee*

*Chairman of the Board,*

*York Ice Machinery Corporation.*

PHOTO BY BACHRACH

## YORK MECHANICAL COOLING IS IN THE



**CLEAR EYES FOR THE U.S. ARMY!**

York air conditioning speeds work at Frankford Arsenal optical shop by eliminating dust and preventing condensation within instruments after assembly.



**stratosphere...at zero altitude!**

York conditions Army aircraft engine test-rooms at Wright Field to 35,000 ft. altitude, requiring the largest refrigeration installations of their type ever known.



**first line of defense**

York provides every type of marine refrigeration for America's new 45,000 ton super battleships, cruisers, destroyers, aircraft carriers, subs, cargo vessels.



York air conditioning means closer tolerances, control of corrosion, concealment for Ford, Douglas, Studebaker and other huge, new blackout plants.



# TOGETHER!

THE "YORK PLAN" of industrial cooperation, epitomized in the now famous maxim, "Do What You Can With What You Have," provides the means of harnessing big business and little business so they can pull together!

America's defense job is too big for big business alone. Only through the teamwork of *all* business can the job be done.

Developed and put into operation by the manufacturers of York, Pa., the "York Plan" today is fast becoming the pattern for industrial communities throughout America.

In providing all manufacturers in a particular region with a complete inventory of the facilities every plant offers, in tools, men, experience, the Plan expedites defense contracts by subdividing them, gains speed and efficiency by allotting to each that part of the work he is best equipped to do.

Thus special priceless machine tools that operated a day a week, or even less, are now working full time.

The York Ice Machinery Corporation is proud of its participation in the "York Plan," and particularly proud of the leading role that has been played by its board chairman, William S. Shipley as Chairman of the Defense Committee of the Manufacturers Association of York.

This corporation is working 24 hours a day to meet the indispensable defense needs of air conditioning and refrigeration, yet because of the "York Plan" is able to take on additional work including the machining of gun mounts, powder presses, machine tool bases, diesel engine crankshafts. With every tick of the clock, this company lives up to the York dictum, "Do What You Can With What You Have." York Ice Machinery Corp., York, Pa.

## YORK AIR CONDITIONING AND REFRIGERATION

*"Headquarters for Mechanical Cooling Since 1885"*

### SERVICE FOR THE DURATION



***This Man's Army Eats!***

York ice-making plants, York cold storage and York service refrigeration on bases and cantonments insure freshness and variety for Army "chow."



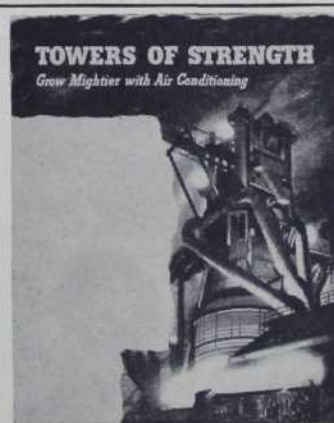
***DRUM-TALK... streamlined!***

York refrigeration helps weave the web of communication, nervous system of defense by controlled quick cooling of cable impregnation at Anaconda.



***War Birds are nesting on this South Sea Atoll!***

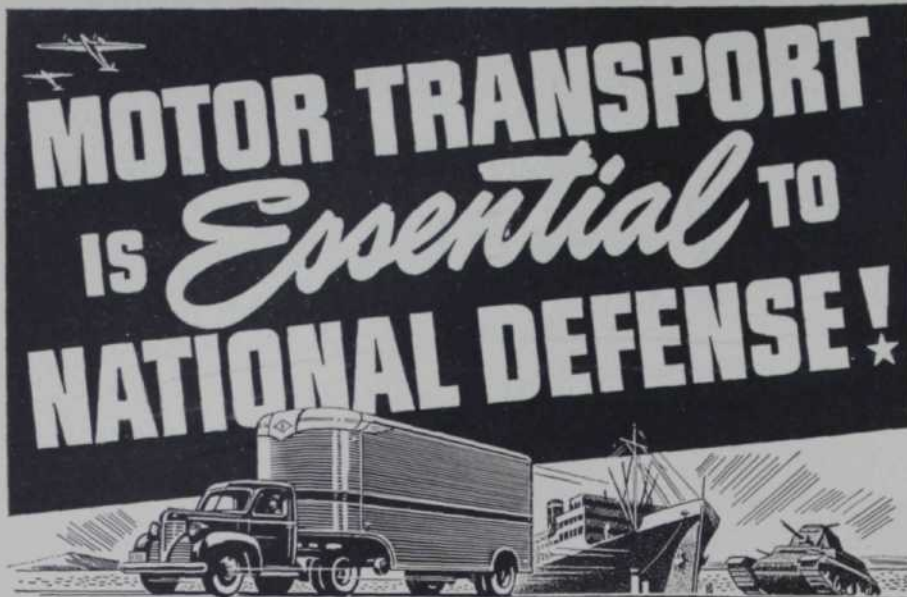
York refrigeration will serve the Navy at Wake Island, mid-Pacific outpost of hemisphere defense to assure Navy fliers and ground crews the comforts of home.



**TOWERS OF STRENGTH**  
*Grow Mightier with Air Conditioning*

York refrigeration helps produce more iron from existing blast furnaces by wringing as much as 35 tons of water a day from the air blown through the tuyeres.






★ *Defense Production, as well as direct Army and Navy preparedness effort, is putting heavy responsibility on the motor transport industry because . . .*


● **Motor transport is flexible**—it quickly adjusts itself to ever-changing transportation requirements.


● **Motor transport is fast**—on many hauls it's even faster than the United States mails.


● **Motor transport is efficient**—direct, door-to-door hauls mean less handling, less possibility of damage, less confusion, less labor cost.


Here, briefly, are some direct, important defense transporting jobs being done by just a few companies that are generally typical of the thousands of users of Fruehauf Trailers:


 **In Oklahoma**—M & D Motor Freight Lines average about 400,000 pounds of general freight monthly to Fort Sill.

 **In Ohio**—Reid Bros. Express, Inc. hauls "bogie" wheels, used on tanks. Suburban Motor Freight hauls carbon for gas masks.


 **In Pennsylvania**—New York & Pennsylvania Motor Express handles propeller shafts, paint for naval vessels, airplane motors and parts for such producers as Bethlehem Steel, Jacobs Aircraft, Trojan Powder Works.

 **In New York**—Dade Brothers, Inc. have hauled hundreds of airplanes for the U. S. Army and British Purchasing Commission.

 **In Alabama**—Howard Hall Co., Inc. hauls cloth for uniforms, valves and fittings for shipbuilding, compressors for naval vessels; 30 per cent of all tonnage they move is for defense work.

 **In Tennessee**—Bond, Chadwell Co. hauls heavy machinery to the Vultee Aircraft plant near Nashville, and boxed planes from the plant, which is some miles from a railroad.

 **In Michigan**—Blair Transit Co. handles over 3,000,000 pounds of freight monthly for the Dow Chemical Co., of Midland, one of the top defense production plants in America.

 **In New Jersey**—New York and New Brunswick Auto Express Co., Inc. hauls to and from such plants as Wright Aeronautical Corp., Curtiss Propeller Co., Bendix Aviation Co.

Multiply these few experiences by several thousand, and you begin to get the picture of the job motor transport is doing . . . and the reason why this industry will continue to be a front-line weapon in the Battle of Production!

*World's Largest Builders of Truck-Trailers*

**FRUEHAUF TRAILER CO., DETROIT**

*Sales and Service in Principal Cities*

**Factories: Detroit, Kansas City, Los Angeles, Toronto**

★ ★ Fruehauf Trailers are now used by the U.S. Army and Navy and by various Federal departments as carriers of personnel, equipment, field searchlights, sound detectors, pontons, freight goods, field machine shops and field printing shops. ★ ★ ★

**FRUEHAUF TRAILERS**

"ENGINEERED TRANSPORTATION"

REG. U. S. PAT. OFF.

**MOTOR TRANSPORT IS ESSENTIAL TO NATIONAL DEFENSE**

of Flowers for the Flowerless "sampling" has proved itself in the way florist trade in the Quaker City has held up as compared to other cities. Florists have 4,000 volunteer salesmen advertising their business. Flowers for the Flowerless is now the largest single distributor of cut-flowers in the country. In one year it has given away as many as 750,000 bouquets, at a cost to the industry of \$1,500 a year or less.

The defense theme is becoming the established pattern for advertising copy. How to relate to defense everything from prunes to golf balls is now the unenviable task of copywriters. Ingenious example is Lehn & Fink's new Lysol campaign offering as a premium to purchasers a "Home Defense Health Kit." Caption for a current ad is "Mother! You're in the Army, too."

The best salesman in many a firm is an employee who never sees the customers but who talks to them on the phone. One who, however busy, is always patient and never abrupt to a business phone caller is a gem without price.

"Several days ago," writes John L. Faurey of Dallas, "an out-of-town friend came in to see me. He wanted to put a certain line of goods in his store and asked me for a suggestion. I called a local wholesale concern, asked for the sales manager and then handed the receiver to my friend. In a moment he received the curt reply that 'Mr. Jackson is out of the city,' followed by a great silence. The operator in the wholesale office had hung up. Her chore was ended; she had got rid of another caller. As it happened, we persisted and my dealer friend finally placed his order, but only because there was nowhere else in Dallas to buy just what he wanted."

No less annoying is the "party" who, in answer to your request for information, tells you to hold the wire "just a second," then never comes back. You sit with the receiver glued to your ear for five minutes and at last give up and call again. Switchboard operators are great sinners in this respect. "I'll connect you," a voice sweetly intones.

You wait for about three minutes, then jiggle the hook, but she has walked out on you.

An increasing number of firms are finding dividends in having efficient young men do most of the talking for them via the telephone.

The old assumption is that men will put up with more annoyance from a comely girl than from a man, which is true enough of face-to-face contacts. But over the wire, customers—both men and women—find more of reassurance in a masculine voice. They feel that here is someone in authority. Especially if the customer is making a complaint and is not in an agreeable humor, a man will be less likely to rub his fur the wrong way. A pleasant, patient but straightforward manner in the manly fashion tends to reduce the complainant's ire.

This is even more true, according to those who advance this theory, if the customer is a woman.

—FRED DEARMOND



## Light for Dark Tax Corners

(Continued from page 46)

job, not only of surveying the various pension systems and preparing their report, but selling the idea to the interested groups. They and subsequent Bureau staff members never contented themselves with bare objective analysis; they tried to bring to reality what their studies showed to be most economical and efficient.

For its State Police organization, too, New Jersey owes much to the Bureau. Paul W. Garrett, now vice president of General Motors, went into that question when he was Bureau director. His inquiry convinced him a good state police system would be worth more than it cost.

Garrett sold the idea in his report. He even drew up the legislative bill which met with all kinds of objection from labor leaders who feared that state police might become a strike-breaking agency.

But Garrett had taken precautions against that. In the bill was a provision that state police could not be used to smash strikes.

Today Alvin A. Burger, director, and his assistants, Thomas J. Graves and G. Gordon Tegnell, are concerned with such problems as state government reorganization, pension fund reform, county and municipal administrative efficiency, and a host of others.

Much of the Bureau's work since the early '30's has consisted of digging out information for various civic and taxpayers' groups. Its program has been under the Chamber's Cost of Government Committee headed by Walter Kidde, an outstanding New Jersey industrialist.

To help taxpayers master the mysteries of municipal budgets, the Bureau recently turned out a pamphlet with plenty of sound advice based on its own experience in battling with politicians and pressure groups. Some of its suggestions include:

Don't be satisfied with making a general plea for lower taxes. Public officials are much more impressed with your suggestions about where and how reductions may be made.

Economies are not always achieved via expense cuts. Sometimes a small increase in expenditure may produce a manifold increase in revenue or in service efficiency.

A private conference with your officials is preferable to a public hearing for your criticisms and recommendations. It is not so spectacular but it usually gets better results.

So much emphasis has been placed on the cost of government that the financial world was pleased—and surprised—to learn from a Bureau survey a year and a half ago that the aggregate indebtedness of local governments in New Jersey had been reduced almost \$280,000,000 in the six years ending December 31, 1938.

In the spectacular fight against the

## Good man gone wrong . . .



Something snapped in a good man's make-up—the familiar story of embezzlement which annually exacts a toll of more than \$200,000,000 from American business.

A Fidelity Bond with Standard of Detroit protects you, the employer, against the results of such human failure. A badge of character for your employees, it is certain financial security for your business. If trouble comes, Standard pays your losses promptly.

Your local Standard agent or broker can help you develop a sound defense against this and other losses—through automobile accident; robbery; injury to you, your employees or the public; and similar hazards. Consult with him *before* your turn comes!

**STANDARD ACCIDENT INSURANCE COMPANY**

*Standard Service Satisfies . . . Since 1884*





## FRIDEN Automatic Calculators

**ACCURATE  
FIGURES**

*in a hurry*

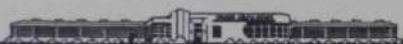
...are an important  
factor in all defense  
plans and operations.

★ ★ ★

The Friden Super-matic Tabulating Model "ST-10" provides figures RAPIDLY and ACCURATELY. Try these amazing Calculators on your own work.

★ ★ ★

Friden Automatic Calculators are Sold and Serviced by a Factory trained personnel in over 250 Company controlled Sales Agencies throughout the United States and Canada.



**FRIDEN**  
CALCULATING MACHINE CO. INC.  
FACTORY AND HOME OFFICE  
SAN LEANDRO, CALIFORNIA

New Jersey sales tax in 1935 the Bureau quietly marshalled the information used by the Chamber of Commerce and taxpayers' organizations for its repeal. New Jersey is the only state which imposed a sales tax and then immediately repealed it.

Usually, in other states, sales taxes were foisted upon the public under the guise of broadening the tax base to re-

force the Bureau's findings to fit its policy. In fact, on occasion, the Bureau's conclusions have been at variance with the Chamber's official opinion. In the early days the Chamber hedged on the reports, introducing each with the disclaimer, "The New Jersey State Chamber of Commerce made possible the investigation the results of which are presented in this report by appropriating

★ ★ ★

## Business, Treasury Watchdog

Several hundred state and local chambers of commerce are helping to control taxes and maintain good government in their states and communities by paying close attention to budgets, debt questions, long-term financial planning for public improvements and other phases of good public fiscal administration. They are convinced that business organizations can and should do something about high taxes.

The New Jersey State Chamber of Commerce was one of the first business men's organizations in this country to appreciate the importance of such activity. The fact that for 25 years this chamber has maintained a Department of Governmental Research is good evidence that New Jersey business men who support their state chamber feel that tax activity pays.

The National Chamber has long put tax work well toward the top of the list of things which an alert business men's organization should be doing for the good of its community. With expenditures for national defense overshadowing all other government activities and adding enormously to the tax burden, business men's organizations are finding it more necessary than ever before to insist upon wise and economical expenditure of the public funds devoted to non-defense matters. The Finance Department of the National Chamber is prepared to assist, through field work and otherwise, continuing activity upon government finance by member organizations.

WELLES A. GRAY, *Secretary*  
Committee on State and Local Taxation  
and Expenditures  
Chamber of Commerce of the United States

★ ★ ★

lieve real estate and usually they became an added permanent burden. That was the experience elsewhere, the Bureau reported, and looked to see whether economies in government would not eliminate the need for new revenues.

They could, the Bureau found, if the politicians would. And the Bureau pointed them out. The panzer divisions of taxpayers took up the slogan "Economy before New Taxes" and blitzkrieged the sales tax. That was six years ago.

Although the Bureau is supported by the Chamber, staff members have always been free to pursue their research with no pressure by the Chamber to

the necessary funds. But the Bureau of State Research and the investigator alone are responsible for its findings and recommendations."

When the Bureau, in one of its first reports, came out for a more adequate workmen's compensation system, there was a short-lived rebellion in the Chamber's ranks. The Chamber endorsed the report's recommendations, however.

The proof of the pudding is that the Bureau remains an indispensable part of the Chamber. It is plugging away to get and bring out the facts that help the people regulate government in an era of increasing regulation of the people by the government.



"TAKE A LETTER TO G-E, MISS MILLER!"



## Here's what people say about properly installed G-E Fluorescent Lighting

"The installation of some 1500 G-E RF lamps in our windowless factory was the first large installation of fluorescent lighting in America. Has been in operation for 2½ years and we have never regretted our choice because good light means easier seeing, faster and more accurate work, fewer accidents and our inspectors report less spoilage. From the first day our workmen reacted favorably to the cool, soft light. There's no maintenance problem other than the usual cleaning. Tube performance and life have been excellent."

ALVIN T. SIMONDS, President  
*Simonds Saw and Steel Company, Fitchburg, Mass.*

"The folks in our office just can't say enough about our new G-E Fluorescent lighting. It gives us lots more light for easier, faster seeing and less eyestrain. The Billing Department claims it has cut down errors and helps them mow down that month-end rush. The drafting boys report it speeds their work, and leaves them less tired."

WALLY ROE, Chief Electrician,  
*Ridge Tool Co., Elyria, Ohio*

"We are very well pleased with our new G-E Fluorescent lighting in our offices where critical seeing tasks are performed, because its more than 50 footcandles of soft, well diffused light helps speed seeing and reduces eyestrain. The fluorescent lighting is cooler too."

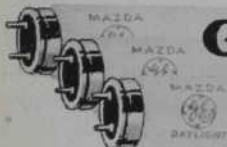
J. H. SHARPE, President  
*The Union Trust & Savings Bank, Steubenville, Ohio*

### TO MAKE SURE OF GETTING FLUORESCENT LIGHTING AT ITS BEST Do these 4 simple things

- 1 Get sound advice . . . How much light does your business need? How should it be installed for best results? These questions can be answered by your G-E MAZDA lamp distributor or local electric service company.
- 2 Ask for CERTIFIED fixtures . . . such as those bearing the FLEUR-O-LIER label, at right, auxiliaries (ballasts and starters) that meet rigid specifications for high power factor, good light, balanced performance.
- 3 Get the benefit of wide choice of fixtures to suit your needs and your taste. General Electric does not make fixtures for MAZDA F lamps, but cooperates with leading fixture manufacturers to assure fluorescent fitted to your needs.
- 4 Get the RIGHT lamp. When you specify G-E MAZDA F lamps, you get all the economies and efficiencies developed by famous MAZDA research. You get lamps designed to fit your needs best . . . lamps made to stay brighter longer.



**G-E MAZDA LAMPS**  
**GENERAL ELECTRIC**





# Kimpak

MADE IN U. S. PAT. OFF. & FOREIGN COUNTRIES  
CREPE WADDING

beautifies as it protects  
your product in transit



Showing how Lightfoot Shultz Co. uses KIMPAK\* on its beautiful American Regency soap package.

The soft, resilient "shock absorber" action of KIMPAK gives your product maximum protection against breakage and damage in transit . . . adds the sales advantage of attractiveness . . . saves time and waste in your shipping room. That's a winning combination.

You buy KIMPAK in rolls, sheets and pads of the thickness and size that meet your needs *exactly*. KIMPAK is inexpensive, light-weight, flexible . . . as easy to use as a piece of string. Since KIMPAK absorbs 16 times its own weight in moisture, it more than meets government postal regulations regarding shipping of liquids . . . Don't delay. Mail coupon for complete information about KIMPAK.

\*Reg. U. S. & Can. Pat. Office

KIMBERLY-CLARK  
CORPORATION

NB-941

Neenah, Wisconsin  
Address nearest sales office:  
122 E. 42nd St., New York City  
8 S. Michigan Ave., Chicago  
510 W. Sixth St., Los Angeles.

Please send me information about KIMPAK.

Company \_\_\_\_\_

Address \_\_\_\_\_

Attention of \_\_\_\_\_

Our product is \_\_\_\_\_

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

# The Money Markets

By  
Clifford B. Reeves

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

## Federal Taxes Exceed Earnings

THE combined earnings of five of America's leading industrial corporations for the first half of the year show that they reserved more for federal taxes than they earned for their stockholders in that period.

U. S. Steel, General Motors, du Pont, Bethlehem Steel and General Electric reported combined net earnings of \$263,116,000 for the first six months, as compared with federal tax provisions of \$298,380,000. Earnings and federal taxes for each of these five companies in the first half of 1941 are compared in this table:

	Net earnings	Provision for Federal income and excess profits taxes
U. S. Steel	\$ 61,374,000	\$ 44,600,000
General Motors	118,177,000	138,360,000
du Pont	41,475,000	38,520,000
Bethlehem Steel	16,087,000	24,900,000
General Electric	26,003,000	52,000,000
Totals	\$263,116,000	\$298,380,000

The reports of leading corporations for the first half of 1941 show that federal tax schedules are affecting the earnings of individual companies in different ways. In some cases, earnings have increased substantially; in others, taxes have reduced net earnings in spite of big increases in business. Many of the so-called "war babies" that were expected to benefit most from the defense program show actual reductions in earnings, while others, affected differently by taxes, report large earnings increases.

General Motors, for instance, showed a gain of nearly 47 per cent in sales in the first half as compared with the same period of 1940. Its net before taxes was up 70 per cent. Net

after taxes was \$118,000,000 as compared with \$113,000,000 in the first half of last year. Meanwhile federal taxes rose from less than \$40,000,000 to more than \$138,000,000.

On a 44 per cent increase in sales in the first half, du Pont showed an actual decline in net earnings—from \$44,877,000 to \$41,475,000. Du Pont's federal tax payments were nearly four times as great as in the first half of 1940.

General Electric's sales for the half year showed an increase of 57 per cent, but its net after taxes was less than \$25,000 greater than in the first half of 1940. Tax payments were almost exactly twice as great as net earnings.

Bethlehem Steel suffered even more heavily from the effect of taxes. Although shipments, orders and pay rolls were all at new highs in the first half of 1941, final net earnings for the period declined more than \$5,500,000, from \$21,698,000 in the first half of 1940 to \$16,087,000 in the first six months of 1941. As compared with its earnings of \$16,000,000, Bethlehem paid income and excess profits taxes of nearly \$25,000,000.

U. S. Steel, on the other hand, showed net earnings for the half that were considerably larger than its charges for taxes, and which also represented a big gain over its earnings for the first half of last year. This year's first half net earnings for Big Steel totalled \$61,374,000, as compared with only \$36,315,000 in the first six months of 1940.

Examination of the reports of these companies makes two things clear. First, taxes are not only absorbing excess earnings, but in some cases leading to actual reductions in earnings. Second, these corporations, on the average, are working primarily for the Government, rather than for their stockholders.

## Think Fast, Mr. Matsuoka

THE recent freezing of all Japanese assets in the United States and the British Empire represents economic warfare of the most effective and aggressive sort. Most military actions settle down into wars of attrition anyhow and are finally decided on the basis of supplies and production. If we can have the economic struggle without the shooting so much the better. Economic sanctions applied in advance of mili-



# What does do for you?



*Officer:* Where d'ya think you're going, to a fire?

*Driver:* Well, in a way, Officer. They just 'phoned me that the Martins have had a fire. Kitchen ruined . . . maid's hands burned. Mr. Martin's away . . . and his wife's all upset. So, I'm hurrying over. Did come up a little fast . . . I'm sorry.

*Officer:* And what are *you*—friend of the family?

*Driver:* More than that, Officer. I'm their insurance agent, too, and naturally they expect me to be on the job at a time like this.

I have to admit you're right—there's no need for hurry. Their insurance protection was worked out carefully months ago, just as you fellows plan in advance against all kinds of law breakers. Bet the Martins never before appreciated the importance of this as fully as they do now!

*Officer:* Okay, Mister. I guess it *is* your fire!



Your local agent knows that the organized fire-prevention activities of the capital stock companies have made "your fire" much less likely to happen. Two decades ago it would have been 50% more probable.

What does capital stock insurance do for you?

Well, sir, it assures you peace-of-mind.



tary action may forestall the latter.

The Japanese freezing order, which was issued on a Saturday after all banks were closed, obviously caught the Japanese Government and its people completely by surprise. They had been misled by their foreign minister, Matsuoka, who had badly overestimated Uncle Sam's patience and assured them that the United States would do nothing that was too unfriendly.

The freezing order, if it is strictly administered, may virtually put an end to Japan's trade with the United States and British Empire, and Japan, which is far from being a self-sufficient nation, depends upon those countries for many of its most vital supplies. Japan was a perfect "natural" for an economic quarantine of this sort, and will be damaged far more than other countries against which freezing orders have been applied. Experts on economic warfare have predicted that the joint American and British action will cripple Japan's economy in six months.

The repercussions in Tokyo were immediate and loud. Stocks on the Tokyo Exchange fell to a ten-year low in wild trading, and it became necessary to close the Yokohama Silk Exchange. As a gesture of conciliation, the Japanese Government immediately announced its intention to pay

interest on its dollar bonds held in the United States, provided Washington would issue permits to make such payments possible. Also, to save face and maintain its dignity, Japan issued orders freezing American and British assets in Japan.

In America, the effects of the Japanese retaliation were hardly noticeable except in the silk industry. Japanese dollar bonds sold lower, and the prices of cotton and rayon shares advanced in expectation of a shortage of silk. Sugar and tin shares also rose, on the theory that Far Eastern difficulties might reduce or cut off entirely all sugar and tin imports from that quarter of the world.

Japan, on the other hand, is now cut off from three-fourths of its sources of supply for iron ore, and— even more important—will now get no oil from either America or the British Empire. The loss of the Japanese market for our oil is no skin off American knuckles, because we are already faced with a domestic shortage and can make good use of what used to be exported to Japan. Most of Japan's supplies of cotton and wool also came from the United States and Australia.

Japan also loses the chief markets for silk, its greatest export item. Inability to get silk will cause dislocations here, but will hardly cripple

America. Japan also loses much of trade with Latin America, which used to be cleared through the United States.

In this exchange of punts, Japan has not only lost a lot of ground, but has perhaps lost the entire game!

### 71 Partners in Exchange Firm

BECAUSE OF its cumbersome name, the stock exchange firm of Merrill Lynch, E. A. Pierce & Cassatt has been known for some time as "We, the People" in the bright lexicon of Wall Street. In recent years it has been perhaps the biggest, and certainly the most aggressive, of all stock exchange firms. Headed by Charles E. Merrill, whose former firm, Merrill Lynch & Co., had been closely linked for years with the development of chain stores, "We, the People" applied modern merchandising methods to the stock exchange business.

Equally imposing in size was the exchange firm of Fenner & Beane; and when these two firms recently merged, the resulting combination was the biggest thing of its kind that Wall Street has ever known.

The new firm, known as Merrill Lynch, Pierce, Fenner & Beane, will have 71 partners, offices in 91 cities and membership in 28 security and commodity exchanges. It will have more than \$6,000,000 of capital. Through the elimination of duplicate facilities, it is estimated that a saving of about \$1,000,000 annually can be effected in overhead.

### Stock Exchange More Cheerful

AROUND the New York Stock Exchange, things have been looking up in recent weeks. First and most important, the market has been stronger and more active.

There isn't much the matter with the Stock Exchange now that a few 3,000,000-share days wouldn't cure. Reflecting the improved market volume, the price of Exchange seats advanced sharply.

The Governing Board of the Exchange has officially approved a plan for internal reorganization which is expected to increase greatly the efficiency of the administration of the institution's affairs.

The plan calls for the complete abolition of the cumbersome committee system under which the Exchange has been run; a reduction in the number of Governors from 32 to 25; and a new method for electing a nominating committee.

The S.E.C. is surveying the question of commission rates, and has sent a questionnaire on this subject to all

## Higher taxes, more insurance

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Offices in



Principal Cities





## The office boy golfed— while I played office boy!

*The office people take turns about coming in Saturday. It was young Joe Harris' turn and I was in because I had to sign a flock of letters for the Community Chest—I'm Chairman this year. Well, just before noon, Doc Eldridge called up and said our club team was short a man for a match in Titusville, and Joe Harris was an alternate. Could I spare him right away? . . . I said sure—and found myself stuck getting out all those letters on a Saturday afternoon—when I play golf!*

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Moreover, the Meter keeps track of postage, and keeps it safe always—fool proof, theft proof. And Metered Mail, already cancelled and postmarked, moves faster in the postoffice, can make earlier trains . . . Almost any business can afford a Pitney-Bowes Meter today. Ask our nearest office for a demonstration in yours—soon!



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member firms. After thus reviewing the present commission schedules, the S.E.C. is expected to take an official stand on this important question; and Exchange members believe that the survey will show clearly the inadequacy of their present commissions.

Brokers are also encouraged by the prospect of certain changes in the Securities & Exchange Act of 1934, and by the move now afoot to transfer the S.E.C. from Washington to New York, all of which would lighten their burdens.

#### For A. T. & T. Big Financing

ONE of the biggest pieces of new capital financing ever undertaken was being conducted

during the past month by the American Telephone & Telegraph Company without the aid of underwriters.

This financing, the need for which arose out of the demands of the national defense program, comprised \$233,584,900 of convertible debentures, which were offered to the Company's own stockholders.

Ordinarily, an offering of this sort would be underwritten by a group of investment banking houses, which would receive an underwriting fee for agreeing to buy any portion of the offering that the stockholders did not take. In this case, A. T. & T. dispensed with such protective arrangements.

In addition to providing for the trading of the rights, and of the new debentures on a when-issued basis, on various exchanges and in the unlisted market, the company also appointed a bank as its agent for purchase and sale of rights.

The \$233,584,900 of three per cent debentures are being offered to stockholders at face value in the ratio of \$100 of debentures for each eight shares of stock held. After January 1, 1942, the debentures will be convertible into common stock at 140, which is about 14 points less than the recent price of the stock. The conversion price is to be paid by surrender of \$100 of debentures and payment of \$40 of cash. Assuming final conversion of all debentures, A. T. & T., in addition to the \$233,584,900 now being raised, will obtain an additional \$93,433,960 from its stockholders, or a total of more than \$327,000,000.

When the registration statement became effective, active dealing began in the rights and in the debentures on a when-issued basis.

The debentures opened around 112 and the rights at about 1½. Dealer interest in both was very large, and the offering seemed to be headed for success.



## We Can Learn About Price Fixing

(Continued from page 42)

domestic agricultural products show one of the steepest rises of all, being now higher by more than 60 per cent.

For this apparently inconsistent phenomenon, wages are chiefly responsible. Coal miners' wages have been raised five times since the beginning of the war, the latest rise taking place in May. The fixing of higher minimum wage for agricultural laborers by another government department forced the Minister of Supply to revise the prices of domestic wool, supposed to have been stabilized in December, 1939, to a figure 30 per cent higher seven months later, in July, 1940.

For failing to stabilize prices because of an increase in the cost of bringing in imported raw materials or because wages were raised, the Minister of Supply cannot be blamed. But the responsibility is his alone for not placing the whole field of raw materials under control. An uncontrolled commodity entering directly or indirectly into the manufacturing costs of a product already controlled frequently necessitated an upward revision before the ink had time to dry on the order fixing a price ceiling.

### Patchwork controls of food

THE control of food prices has been equally ineffective and its history is one of patchwork improvisation. When war broke out, the Minister of Food stabilized what he chose to call *basic* food products at practically the levels in August, 1939. Only a few products were classified as basic and their selection seems to have been on the "eeny meeny miney mo" method. Canned salmon was controlled from the beginning but not canned herring; beef but not poultry, dried fruit but not soft fruit.

The Minister of Food was quite wrong in assuming that there was such a thing as *basic* foodstuff. Substitutes replace basic foodstuffs when there is a shortage of the latter and these, on entering the class of basic foods, soar in prices if uncontrolled. Prices of one food product after another have been fixed at a figure infinitely higher than if all food had been controlled as soon as it was decided to place a ceiling on some. While, allegedly, foodstuffs are only up 32 points, the index figure should be much higher to present a true picture. The Government is heavily subsidizing certain food products to keep their prices to the consumer down, flour being a notable example. These subsidies this year will cost not less than \$400,000,000.

The extension of price control, at last, to everything that the human being can eat is one more illustration from England that an uncontrolled part of the price structure upsets the controlled part and the only hope of a stabilized system is the universal application of control.

The experience in the retail field fur-

# GOOD BUSINESS NEWS



## for acute cases of... CAPITAL DEFICIENCY

WHEN a growing business outstrips the capacity of its bloodstream... its working capital... the result is "financial anemia." It may be pernicious, or even fatal, if the business gets over-extended and the capital deficiency too acute.

The Homestead Equipment Co.\* risked this fate. In 1936 it did a volume of \$34,000 on a capital of \$6,789.

By January 1st, 1937, however, the business began to feel growing pains. Sales were booming at such a rate, the owners found they needed more working capital. But on the basis of tangible assets, as shown in the balance sheet, they were not able to borrow. As a rule banks don't often make loans on the strength of character and prospects.

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\*A fictitious name, but the facts and figures, taken from our files can be verified.

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ther confirms this. With the Minister of Supply doing his haphazard best to keep down the prices of raw materials and the Minister of Food doing his disjointed worst with foods, public agitation became pronounced in England two months after war began, because shopkeepers were apparently putting up retail prices as much as the traffic would bear. The Board of Trade, to meet the situation, rushed through Parliament, in November, 1939, the "Prices of Goods Act."

After December 30, 1939, about 300 articles, which the working classes chiefly bought, could not be sold above their prices in August, 1939, plus "permitted increases" because of additional costs of manufacturing since that date or a rise in the wages of the sales force, etc. The act was further extended to cover almost every retail article in July, 1940.

### Controls made more complete

IN THE last week in June, 1941, this retail price act was still further amended by the "Goods and Service Act (Price Control)." The clause "permitted increase" circumvented the purposes of the first act. A controlled retail article might pass through any number of middlemen from the time it left the manufacturer, and the profits of the middlemen under the Prices of Goods Act were "Permitted Increases." Thus, imported marmalade landed at a port at 8½ pence (roughly 17 cents), after passing through a warehouse and the hands of six middlemen, it sold to the customer at roughly 84 cents. The new act will put an end to this as it fixes a maximum retail price for any article at any stage of its production or distribution.

The extension of the meager "Prices of

Goods Act" of December, 1939, to the all-comprehensive Act of June, 1941, shows that the Board of Trade was no less guilty than the Ministers of Supply and Food in thinking that price control could be effective by patchwork edicts applied in a piecemeal fashion.

The experience of the Board of Trade also, perhaps, illustrates the almost insurmountable difficulties in the way of applying any effective system of price control under a democratic form of government.

But the placing of ceilings on various prices is not the only method of control that has been tried in England. In this war, rationing has been extensively used, not to even out the distribution of goods in which a shortage had developed, but to deter buying. In his budget speech of last April, Sir Kingsley Wood specifically stated that rationing was purposefully being used to prevent a rise in prices.

Whether it is a wise policy to change the habits of a nation by forcing its people to do without accustomed goods, because some theorist fears inflation, we shall not know until after the war is over. The dislocation to the distributive trades, which the drastic rationing of clothes involves, will undoubtedly leave its mark long after the war.

That rationing is momentarily arresting a larger scaled inflation seems proved by the fact that, although the cost of living index is up about 25 to 30 per cent and average wages about the same percentage, bank clearings are no higher than they were a year ago, while bank deposits are much higher. The people are therefore not spending for goods the extra money they are earning.

There is one factor in the English situation which, at every turn, vitiates



"Do we telegraph smoke signals?"



the best laid schemes to keep prices down. Trade unionism in Britain is of long standing and collective bargaining an accepted method of settling relationships between labor and capital.

When the Government steps in and decides what the profits of capital can be by dictating what prices it can quote for its goods, the logical thing would be for the cost of labor which enters into the cost of manufacturing those goods to be also controlled. This, so far, has not been the case in England. There is no ceiling on wages. This is a particularly pernicious situation in England as about one-half of the 21,000,000 wage earners are inseparably linked in their wage arrangements to a change in the price level, and any upward movement is immediately reflected in an increase of wages.

About 2,500,000 workers have their wages tied to the cost of living and a similar number to a "selling price of the product of the industry" formula. Another 5,000,000 workers, while not themselves affiliated with the various trade unions involved, have friendly understandings with their employers so that any increase in the wages of kindred industries will also apply to them. Hence the wages of one-half of the workers of England are constantly a source of disturbance in any effort at price stabilization.

In the first three months of the present year the average weekly wage bill practically increased as much as in the first three months of the year before. In March, 20 per cent of the increases were automatically based on arrangements carrying over from peacetime while in February the proportion was nearly 50 per cent. The agitation for a greater control of labor is growing and a fixed national wage to last for the war period is being advocated.

The conclusion is inevitable that England, having embarked upon a policy of price control, should have pursued it relentlessly. The attempt to attain a stable structure by controlling only sections of it was doomed to failure from the start. Germany's stabilization of prices at 1939 and of wages at 1936 levels, which has resulted in a stable condition in her totalitarian economy, was not immediately possible in a democracy. But, as the exigencies of a total war demand more and more control, it is not the part of democracy to exact sacrifices from part of the community and pretend that another can be allowed to bask undisturbed in the sun of peacetime privileges.

This is what the attitude of labor in England has so far been. It has maintained that wages are not a material part of the price structure and, although privileges of others have been blacked out, labor has so far given up nothing. It keeps not only the right to demand higher and higher wages, but also to strike when it feels like it. England is finally discovering that price control cannot be effective as long as the fiction is maintained that labor and wages are outside the operation of a planned economy of which price control is one aspect.



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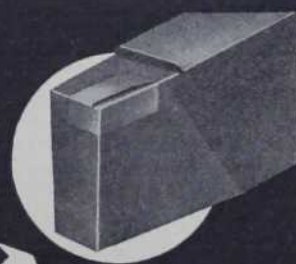
But measures which allocate our available tungsten supply for defense production do not entirely solve the problem. We must also get the most efficient use from this tungsten after it is put to work to completely conserve this valuable metal.

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## Cities Try Glad-Handing

By DOROTHY NORDYKE

EVERY stick of furniture we owned, including the baby's crib, was piled in the living room. We'd moved 700 miles and spent three days looking for an apartment where children were allowed. The van came, and the men piled our things in the living room. It looked hopeless.

The doorbell rang, and I could have screamed. Unpacking and arranging promised to be more of a back-breaking job than packing and moving had been. Besides, the baby was cross. She was at the crawling stage, and she was without her crib. So someone had to keep an eye on her every minute. We were tired. We'd been trying to assemble the baby's crib, and the screws were missing. I remembered vaguely having put the screws in some safe place.

The bell rang again. I cracked the door and said,

"We're terribly busy."

"Just moved," remarked the caller, an attractive and smiling woman. "I know how it is. So I've come to help you."

I was puzzled. Almost unconsciously, I opened the door, and in the visitor walked.

"I'm Florence Welter," she explained. "I'm the city hostess, and I came out to see if I could help you. Knew you'd be terribly busy."

### Officially welcomed

SHE handed me a letter of welcome from the mayor; then she gave me the afternoon paper and tickets good for milk, butter, corn meal, gasoline, a tune-up and wash job on the car, the movies and a number of other things. In all, we received at least \$30 worth of articles and services.

Within a few minutes we were sitting on the furniture discussing the city. Mrs. Welter did a good job of selling us on the new home town, and, for the first time since we started packing, I was able to relax. Suddenly I remembered the screws for the baby's crib were in my purse; I'd put them there so I'd be sure and remember where they were. We fixed the crib, and baby was happy.

The hostess is one of the hundreds of self-appointed glad-handers in the country; practically every town of more than 10,000 population has one. These women have developed to a high degree the fine art of soothing move-

shattered nerves. Persons forced suddenly to give up friends and family connections, not to mention places where you can cash checks without question, and to move to strange towns need just such a nerve tonic and grouch slayer.

The hostesses have their hands full now. There is an almost unprecedented amount of moving; persons working in the various phases of the defense program are moving, or being transferred, everywhere. They need help, because almost any little thing can throw a moving family out of adjustment.

A family moved to our town of Amarillo, Texas. The man had been transferred. The family had to give up a home recently built. They had difficulty finding a place. No dogs were allowed in the one they finally had to rent. When Mrs. Welter arrived, the wife was begging the husband to quit his job and return to their former home and take a chance on finding a job. The hostess convinced them they should try the new place at least a short time. The woman started sobbing.

"But Jiggs—what can we do with him?" she wailed. An aging Boston bull peered sad-eyed through the screen.

The hostess kept the dog until the family found a place where Jiggs had a big, grassy backyard. The family is happy.

In Omaha, Mrs. Grace Wachter, city hostess, called on a family. The van of furniture was standing in front of the house. Members of the family were in the yard. The man was declaring publicly that someone ought to be shot. The house had been sold after it was rented, and there was immediate cancellation. Mrs. Wachter knew a nearby house had been vacated. She took the family over, called the real estate agent. The family rented the place, and within less than an hour their furniture was unloaded.

Mrs. Wachter, like many another hostess, plays cupid. A family she visited had a daughter just out of college. The girl was sorely grieved because she had been forced to leave friends and move to a strange place. She showed no interest in her new home. The hostess had visited a family in which there was a young man, also just out of college and thoroughly dissatisfied. The hostess suggested



# THE EAGLE GROWS NEW PINIONS

## IN DEFENSE OF THE "AMERICAN WAY"



**D**AY BY DAY America is growing in strength. Within a measurable space of time, now, it will have the protection of fully modernized, armed forces. But, in the building of those armed forces, there is one factor which deserves immediate consideration; it is *transportation*.

### Freight Cars—the vital factor in our defense program

With the transfer of coastal ships into service elsewhere, the shifted burden of the nation's transportation has fallen on the railroads. This means that the railroads must undertake keeping our growing forces supplied with guns and food and clothes! Also, they must transport the parts and materials industry requires in the production of armaments; and finally they must be prepared to fill these vital assignments without slighting their normal job of moving the commodities essential to civilian life.

Thus, in its present stage, the problem of building our strength revolves around building enough freight cars. And, fortunately, this country has the facilities, the resources and the strategic sense to carry out that program.

### Pullman-Standard plants are keeping pace in their part of the Program toward producing the necessary thousands of freight cars of all types.

Already, in Pullman-Standard's plants, in answer to the call for speeding up freight-car production, *one complete car is being turned out every 4½ minutes of each working day*. And that is not the limit of Pullman-Standard's effort, for its production lines are being further keyed up to increase the present high rate of output . . . by reducing the blackout through multiple-

shift operation, seconded by added facilities and further standardization of car design . . . larger orders resulting in longer runs . . . a continuous flow of all materials . . . and the co-operation on the part of all suppliers of raw materials and finished parts.

Pullman-Standard is able to make this telling contribution because it has 82 years of fruitful experience . . . extensive and capable research, engineering and production staffs . . . expert metallurgists . . . millions of man- and machine-hours . . . and, as a quickening spark, the loyal determination on the part of every worker to do his share toward giving our country a transportation system sufficient to the Emergency.

★ ★ ★

*In addition to railroad and transit equipment, Pullman-Standard is making a further vital contribution to our defense program by manufacturing Tanks, Trench mortars, Gun carriages, Shells and Airplane wings.*

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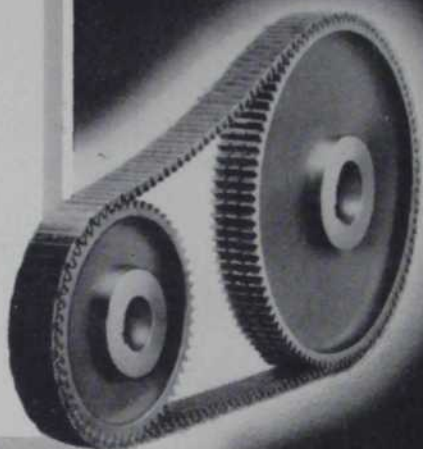


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Write NATION'S BUSINESS • Washington, D. C.



that he visit the girl in the other family. He did. They married within the year.

In Council Bluffs, Iowa, a hostess spent a full afternoon persuading a woman not to force her husband to move back to the old home town and give up a promotion and a \$50 increase in pay. She finally clinched the argument by taking the newcomer to a beauty parlor, where she talked with other customers while getting a free hair-do. The newcomer said she was delighted with the brand of gossip.

### Friends in the new town

THE St. Louis glad-hander, Mrs. Charles Lippert, found many unhappy girls of late teen-age among new families. She discussed the matter with a few boys attending college in St. Louis. Soon the lonely girls had plenty of friends and dates.

Mrs. Lippert sponsors an All-States Club in the city. It is made up of strangers—wives and girls in newcomer families. Recently 200 women from 37 states attended a club meeting. Fewer than a dozen had ever met any of the others. A year is the limit. As soon as the women become well acquainted they must drop out to make room for more newcomers. Similar clubs are making friends of strangers in Memphis, Tenn., and in many other cities.

Mrs. Lippert is one of the "mothers" of the city hostess idea. Fifteen years ago she observed newcomers who visited her husband's business in Lincoln. Their questions set her to wondering what could be done to acquaint newcomers with their new home town. The hostess notion hatched, and Mrs. Lippert has been in the business ever since. She has helped in the organization of hostess business in dozens of cities.

The business has branched out. In many cities there are hostesses for brides and new mothers. But it isn't a thing of charity. It is a straight commercial proposition. The hostess examines new utility contracts and obtains the names and addresses of newcomers. Then she goes out to see them. She represents business firms. They pay her salary and provide the articles she gives newcomers. To avoid any possible strife of competition, the hostess represents only one firm in each line of business—one department store, one dairy, one bakery. These clients, of course, are recommended to the newcomers. It is effective advertising promotion.

Some dairies, bakeries and laundries report 100 per cent immediate return, which results in a big percentage of permanent customers. Appreciation, perhaps, for the soothing of move-shattered nerves.



## Draftees Hold Benefit Claims

**T**HE FACT that unemployment benefits in almost all the states are based on earnings during the year just preceding the benefit claim would automatically disqualify selectees after their return from a year's service. In the states which have amended their laws, benefit rights are frozen as of the date of entry into service, and a draftee after his year of training will be able to collect unemployment compensation if he returns to civilian life without a job—provided he is credited with the required earnings from the "base" year before training.

Further protection for service men was provided by Rhode Island and Washington. Rhode Island abolished the waiting-period and established a standard weekly benefit rate of \$16 for draftees earning at least \$100 in the "base" year before entry into service. Washington legislated to credit state residents with \$300 in quarterly wages for the time spent in service, thus establishing basis for the compensation claim.

Revisions in unemployment compensation laws, the Public Welfare Association reports, also resulted in the reduction by at least 15 more states of the wait for benefit payments from two weeks to one, while four reduced the waiting-period from three weeks to two. Maximum benefit payments were increased to \$16 a week in Indiana, Ohio and Oklahoma. Maryland, Georgia and Utah increased maximum benefits to \$17, \$18 and \$20, respectively. Twenty dollars is top in the country, although most of the states still pay \$15 maximums. At least ten states increased minimum benefit payments this year.

Except for Washington, changes in the coverage of state employment compensation laws were of less significance. In Washington employers of one or more workers are now included under the law. Florida and Ohio made some extensions of their acts—Florida by covering 30,000 citrus fruit packing employees; Ohio by bringing in governmental units with proprietary, or business functions.

Other unemployment compensation legislation tightened restrictions on the benefit rights of seasonal workers and those who quit voluntarily or are discharged for misconduct. Benefit rights for seasonal workers were limited, for example, in Delaware, North Carolina, Oregon and Texas. Penalties which lengthen the waiting-period were imposed in approximately 20 states for voluntary resignations from jobs.



**It's the "Little Things"  
That Count!**



New DeLuxe Type Erie coach with adjustable (four-position) rotating seats—the last word in comfort—and at no extra charge!



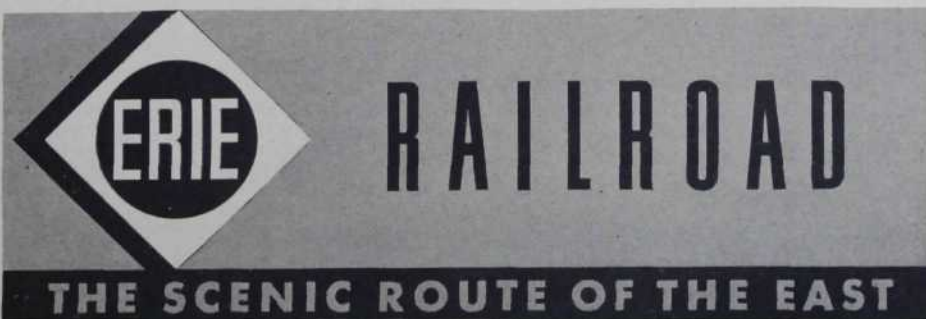
The Erie main line parallels the beautiful Delaware River through one of the most fascinating sections of New York State.

● "Little things" are mighty important to us—whether you mean tiny tots riding to grandmother's or those little extra services that can make such a *big* difference in your travel enjoyment.

For example, lights are dimmed at night in Erie coaches. Thoughtful conductors never disturb sleeping passengers for tickets. Through countless individual courtesies members of train crews and diner crews, as well as station attendants, strive constantly to increase the comfort of our passenger-guests.

But there are *big* things you will appreciate, too. Modern, air-conditioned equipment, including new De Luxe Type Coaches, Pullmans, and luxurious Diner-Lounge cars. A *smoother* ride over one of the finest roadbeds in the land. Miles of the most beautiful scenery east of the Rockies.

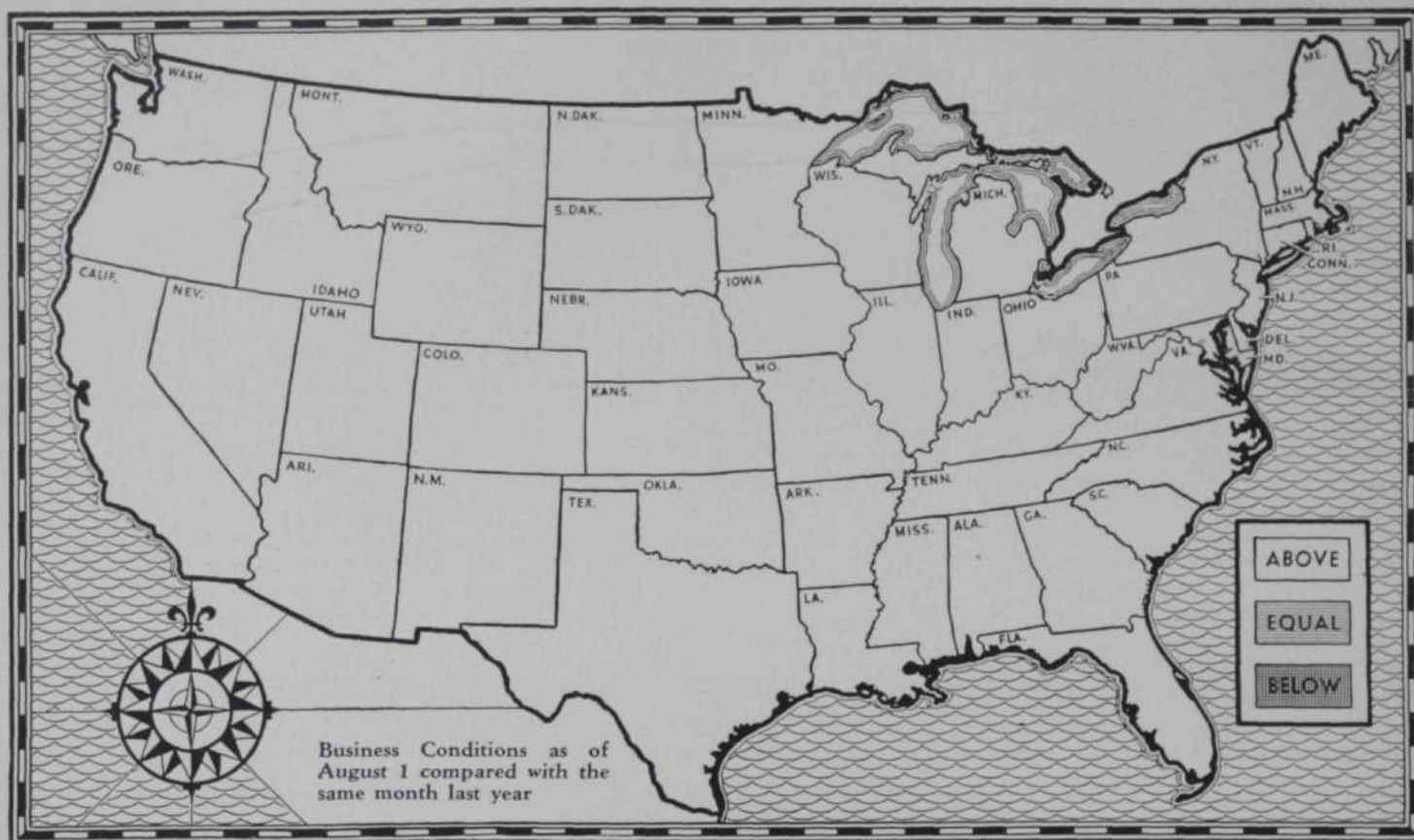
Traveling east or west, try our way next time. Remember, fares on "The Friendly Erie" are the lowest in the East!





# The MAP of the Nation's Business

By FRANK GREENE

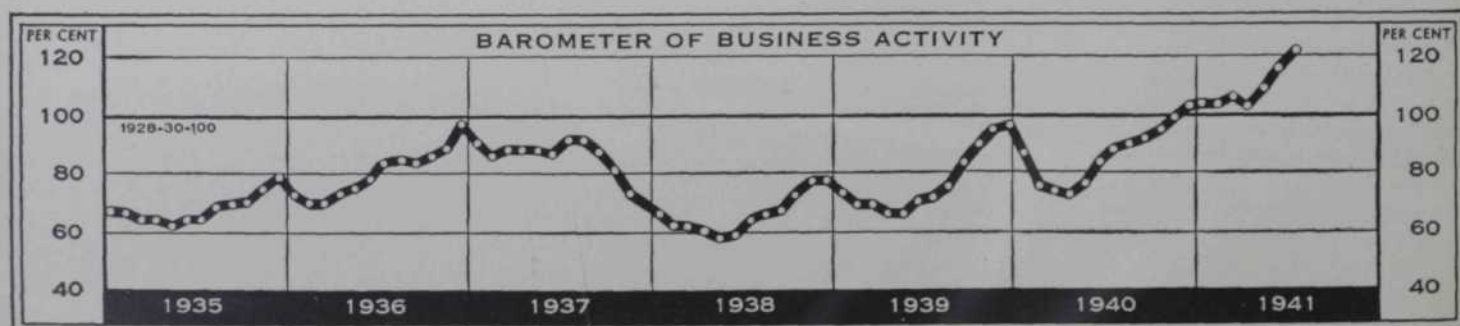


INDUSTRIAL activity during July continued at a high average, with increasing disruption of non-defense lines offset by the spread of war orders. Bottlenecks, due to material shortages, appeared more frequently. Steel orders continued to pile up but ingot output was slightly lower due to lack of scrap. Carloadings held strong but needed deliveries of rail equipment were delayed despite priority ratings. Automobile output remained abnormally high as the model year end drew near.

Successive records were established in electricity output and construction awards rose far above previous monthly peaks under the stimulus of defense building. Stock market prices and volume of trading were highest of the year as business loans again increased.

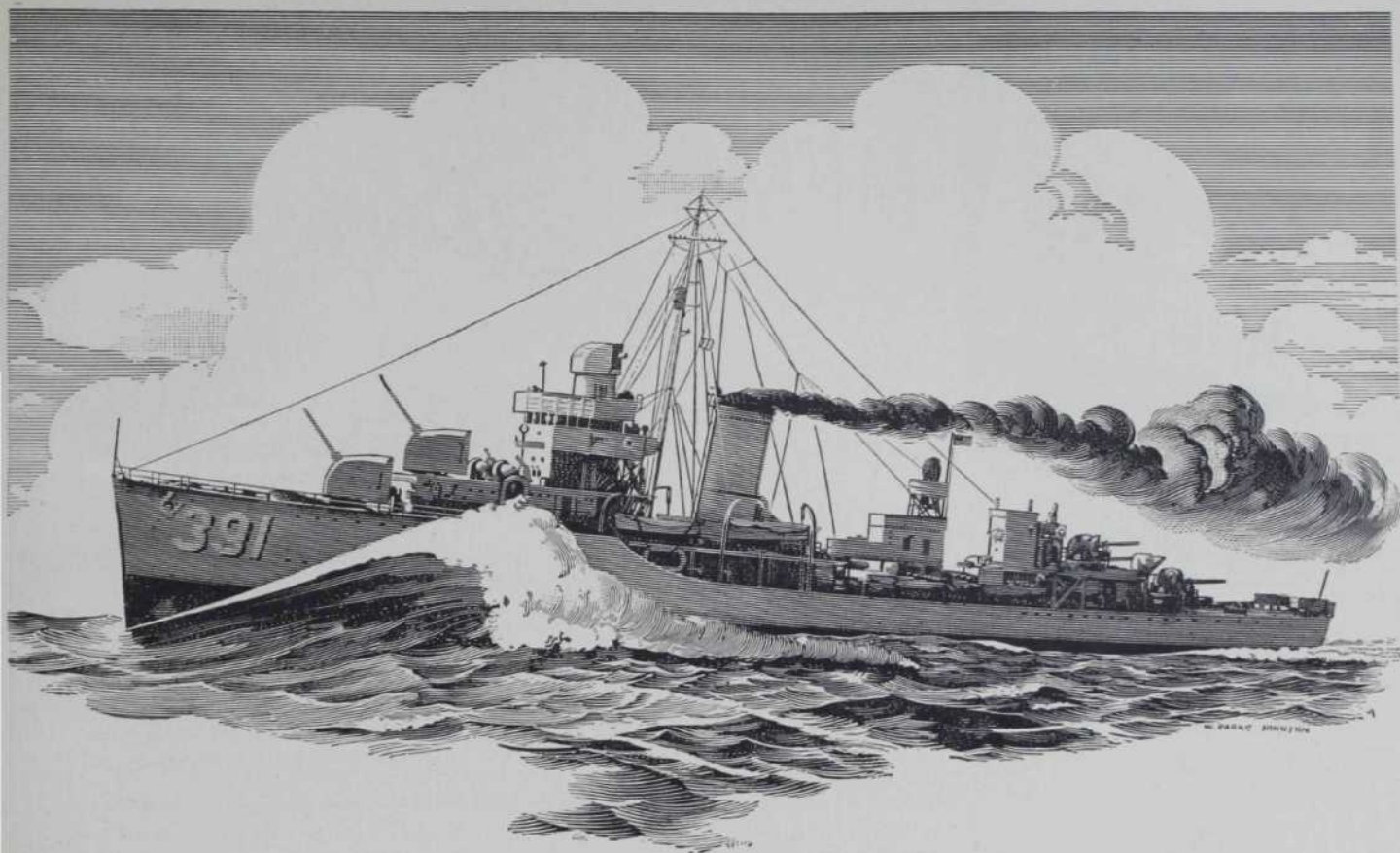
Commodity prices advanced, led by agricultural and import products. Wholesale markets were stimulated by inventory buying while retailers experienced the best summer in a decade. Business failures were fewer and bank transactions rose 24 per cent above a year ago.

Again a solid white map results from the widespread effects of defense spending, reflecting conditions far above last year



As the country's capacity to produce moves steadily forward and employment continues to expand, labor shortages have appeared in many industries and the Barometer for July advanced to a new peak in the history of the country





## “Always Ready”

“...The Navy is always ready”

Secretary of the Navy FRANK KNOX  
May 7, 1941

Our First Line of Defense—The Navy—in ever increasing strength stands watch over the American nation. And each day the tempo of our shipyards, the basic factor in our country's naval power, is accelerated.

Bank credit—like the U. S. Navy—also is always ready. The Chase National Bank and other commercial banks throughout the land are actively participating in financing the construction of the new shipyards which are beginning to dot the nation's

coastline. The staccato tattoo of thousands of riveting machines heralds the growth of an invincible two-ocean navy, as destroyers and other ships of war glide down the ways months ahead of schedule.

In the building of shipyards, as in other rearmament activities, bank credit, available today at costs lower than ever before in the nation's history, helps to place in the hands of our armed forces the means of defending the country's safety and integrity.

# THE CHASE NATIONAL BANK

## OF THE CITY OF NEW YORK

*Member Federal Deposit Insurance Corporation*

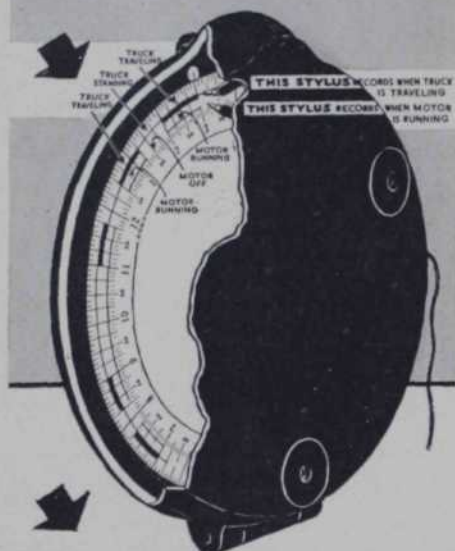


# How to Save Time.... **AND GAS** on Motor Trucks

## THE SERVIS RECORDER

(Double Stylus Model)

### DOES BOTH!



**NO. 1** Stylus points out wasted time

**NO. 2** Stylus records **WASTED GAS**



Mr. Ickes should be interested in this No. 2 Stylus.

We used to think *wasted time* was the most important. Now we're not so sure.

Gas is scarce, actually scarce! We know that. So why let any engine run idle? The **SERVIS RECORDER, Double Stylus Model**, points out this kind of waste in a hurry.

Send for folder and full information on the Double Stylus Model.

**THE SERVICE RECORDER CO.**  
1375 EUCLID AVE., CLEVELAND, OHIO

## The Servis Recorder

Shows When Motor Was Idling  
— And How Long

# MEMO

## for Busy Readers

1. Spotless paint helps workers
2. Pipe smoking goes native
3. Boom in the house on wheels

### Bright Paint Raises Morale

DO WORKERS get a lift of the spirit from bright, clean and spacious working quarters? Answer in the affirmative is offered by the American Rolling Mill Company.

Level of morale, the company has demonstrated, can be raised by liberal use of paint.

In its current painting program ARMCO has used approximately 1,100 gallons of paint at the East Works in Middletown, Ohio, including interior walls of the machine shop, the galvanized storage warehouse, hot finishing processing department and the finishing and distributing building.

White paint, applied with a spray gun, made the interiors lighter, reflecting all the natural and artificial light, creating illusion of greater space. Workers have come to regard spotless paint as a visible symbol of "good housekeeping," a company policy operating as a suggestion for the workers' homes.

Because the white paint is regarded as a builder of morale, affecting a large part of the 5,000-odd-men personnel at the East Works, the management has decided to finish in white the interior walls of all new buildings now being erected in the cold strip department at East Works.

Virtually the same treatment has been given inside walls of one building in the ARMCO blast furnace unit at Hamilton, Ohio.

### Digging for Pipe Smokers

BRIAR for pipes, formerly imported from France and Italy, is so difficult to get in sizable quantities that roots of the laurel are now finding a ready market.

Producers of pipes from western North Carolina laurel say average smoker will not be able to detect difference.

Laurel is abundant. Digging has centered in Burnsville, Spruce Pine, Hendersonville and back in the Great Smokies. Natural beauty of the mountains is not marred because root removal is carried on some distance from highways.

Laurel roots range from burls of a few pounds to 800 pounds. Mountaineers dig them, are paid about half a cent a

pound. Burls are trucked to mills, where they are sawed into pipe blocks while still green, are then ready for seasoning and fashioning into finished bowls. Thousands of these tough blocks are being shipped from western North Carolina in revival of an industry which flourished during the first World War when briar imports from abroad were cut off.

### Trailers Help in Housing

NEW trailer populations springing up in defense-industry and army camp areas emphasize trailer regulation problem faced by local and state governments. Approximately 250,000 houses on wheels are now in use—total of trailer "settlements" is about 2,000. By summer's end federal Government expected to own and operate 5,000 additional trailers for emergency housing of defense-industry workers.

Trailer regulation is concerned with health, sanitation, school provision, safety and morals. Satisfactory control of trailers by general ordinances on health and safety is reported by some municipalities, but many have enacted ordinances relating specifically to trailer camps.

Because many trailer settlements are outside jurisdiction of municipalities, state regulation is coming to the fore.

In both cities and states, much of the regulation pertains to health protection, the American Municipal Association reports on basis of 37 municipal ordinances adopted since 1937 and several of the new state trailer regulations. In a majority of the municipal ordinances, licensee of a trailer park is recognized as operating a commercial service and is made directly responsible for the condition of its facilities. Some cities, St. Paul, for example, require a register of persons.

Evanston and Chicago ordinances specify that trailers must carry fire extinguishers.

### Tire Makers Stretch Wear

AVERAGE motorist will require this year only half as many replacement tires as he needed in 1928 despite steep increase in volume and speed of present motor



★

# *Concerning*

## THE AVAILABILITY AND QUALITY OF DODGE *Job-Rated* TRUCKS

★

THE FIRST obligation of Dodge today is to contribute to national defense. Our contribution, at present, is two-fold: In our extensive plants, Dodge is producing important national defense units, including thousands of Army trucks. Also, Dodge is building trucks for the transportation of vital commodities—the movement of which is the essence of *complete* national defense!

On the broad shoulders of America's great trucking industry lies the responsibility of moving largely increased quantities of materials . . . *efficiently, dependably, safely* and at *lowest cost*. The trucking industry's willingness and ability to do this job is beyond question. It becomes a matter of the availability and the quality of trucks. The need is for trucks that are *built* for the job . . . to *stay* on the job . . . *Job-Rated* trucks!

Today, we are building more trucks than ever before in our history: trucks for the Army; trucks for industrial

defense hauling! They're *good* trucks . . . the *best* we've ever built! Best design, best materials, best workmanship, best quality throughout.

*Now, we also announce more powerful trucks . . . much more powerful than ever before. We're building these higher-powered trucks today . . . shipping them to our dealers. And, we'll continue to do our utmost to get trucks to you . . . quickly . . . as you need them.*

Defense *needs* the trucking industry. The trucking industry *needs* trucks. Dodge is providing the best trucks that men, materials and machines can create, *Job-Rated* trucks of the same high standard of excellence that has won for Dodge its traditional reputation for Dependability.

*H. J. Miller*  
President, Dodge Division,  
Chrysler Corporation

*There can be no curtailment of Dodge Quality  
... no substitute for DODGE DEPENDABILITY*





## Squeezes Water Uphill



**T**HIS helical chrome rotor lifts water without impellers, plungers, pistons or valves. Neither a turbine pump nor plunger pump, it combines the advantages of both in a highly efficient compact unit, easy to install, service and keep running. No priming or pre-lubrication is necessary. Rotates at half the usual turbine pump speed. Capacity—500 to 3500 gallons per hour. Maintains maximum desirable head pressures. For installation in wells as small as 4" in diameter with maximum lifts. Small variation in capacity regardless of lift or pressure. Any form of drive. For further information write Peerless Pump Division, Food Machinery Corp., Dept. NB, 301 West Avenue 26, Los Angeles, California.

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**WOODSTOCK**  
TYPEWRITER

when the  
**NATION'S BUSINESSMEN**  
go to Washington  
RATES FROM \$5  
THE *Carlton*  
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travel. Number of tires sold this year for replacements will approximate 1940 totals which averaged only 1.26 tires per registered car in contrast to 1928 when motorists bought 2.27 tires per car. Reduction represents savings of one tire per registered car.

Lengthened tire life reflects tire makers' achievements in terms of greater mileage and improved non-skid and blowout protection. Concurrently, tire prices have declined. If today's tire prices bore same relation to the 1926 price index as does the price level of all commodities, producers say, motorists would have to pay 36 per cent more for their tires.

Statistics compiled by B. F. Goodrich Company show that replacement tire sales in 1928 reached an all-time high of 52,470,000 units compared to 39,037,000 tires—including spares on new cars—sold in 1940 when motor vehicle registrations, as of the first of that year, totaled 31,010,000, or a third greater than in 1928.

### Drive for New Ships Speeded

problem of getting enough shipping to make nation's foreign policy effective is indicated in fact that by mid-June country's armed forces had taken over nearly 1,000,000 tons, or approximately one-eighth of nation's pre-war merchant fleet; that 1,500,000 tons of American merchant marine had been transferred to foreign registry, more than half going to United Kingdom or its allies, remainder to neutral countries, notably Panama.

"Obviously, diversion of present shipping is only a stopgap measure," comments *Index* of New York Trust Com-

pany. "In view of the recent rate of ship sinkings, adequate aid for Great Britain can result only from the swift construction of additional shipping on a gigantic scale. Under the impact of the present emergency, the shipbuilding program inaugurated following passage of the Merchant Marine Act of 1936 has been greatly increased in size and scope. Early estimates were that construction in 1941 will total about 700,000 tons, but construction is now expanding rapidly and current output is at a considerably higher rate than at the beginning of the year.

"Present estimates indicate 1,000,000 tons might be produced.

"Of even more significance," as the *Index* reads the situation, "is what is already being done to increase shipways and other building facilities. In May, 1940, when the seriousness of the threat to this country became generally apparent, 133 shipways were available. This number is expected to be more than doubled with a total of 322 in the coming year.

"In the closing months of 1942, when all these enlarged facilities are available, construction of new shipping is expected to proceed at the rate of nearly 2,500,000 gross tons."

### War Causes Trade Shifts

WAR'S influence on the channels and composition of American foreign trade is revealed in fact that exports to British Empire destinations increased 55 per cent in year's first quarter while those to all other countries declined 45 per cent.

United States imports also were affected by world-wide war conditions, as

**ACME  
TREE  
SURGEONS  
ASSOCIATES**



"Acme Tree Surgeons Associates. Tim-Berr!"



witness an increase in imports from the British Empire of 23 per cent. Imports from non-British countries gained only two per cent.

Contrasted to the heavy exports recorded to South America in first three months of 1940, first quarter figures for 1941 were off 19 per cent.

Imports from South America gained 41 per cent over last year's corresponding period.

Total United States exports, declined by the amount of \$82,000,000, a 7.7 per cent decrease by comparison with corresponding three months of 1940. Cotton figured most in the decline.

By report of the National Chamber's Foreign Commerce Department, cotton exports slumped \$118,000,000, half again as much as the total export decrease.

Figured on a quantity basis, 69 out of 123 leading exports gained over the first quarter of 1940, thus showing 56 per cent of our major export commodities benefiting by increased demand abroad.

Much of this expansion is clearly traceable to war conditions.

#### New Businesses On the Decline

CHANCES for success in business are on downgrade measured by yearly totals of new incorporations. Despite defense uplift of business activity to record high for last ten years, incorporations of new enterprises are only half as numerous as in 1929, and more than a third off the 1932 figure.

Prospects for profits, and ease with which equity capital can be obtained are the factors that rule establishment of new companies.

A declining trend in new incorporations, the Cleveland Trust Company believes, reflects decreasing confidence in ability to compete with going concerns, and hesitation of investors to accept risks.

In the period of sustained prosperity from 1925 to 1929, new companies were founded in increasing numbers, the bank reports, as the first of unusual optimism. After the peak of business activity in 1929, new incorporations also turned down, but their decrease was modest in the period of rapidly declining business that reached its low in 1932. The downward trend then in evidence has since continued.

Current low level of new business organizations is strangely accompanied by a relatively small number of commercial failures.

Before 1933 the number of new incorporations and the number of business insolvencies tended to move in opposite directions. When times were good, relatively few businesses failed, more and more people decided to organize new companies.

Since 1934 the number of commercial failures has remained near a level representing about half the number of failures that occurred in the period of the 1920's.

For the first time, a low level of failures is not acting as a decisive incentive to business men considering the possibilities of success in new enterprises.



World's Most Powerful Diesel Freight Locomotive. Length: 193 feet. Tractive effort at starting: 220,000 lbs. Powers: four 16-cylinder G.M.C. Diesels, developing 5400 h.p., generating electricity for 16 electric traction motors. Top Speed: 75 m. p. h. Non-stop Range: 500 miles.

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**3 DIESEL FREIGHT LOCOMOTIVES**

**EXPEDITE "LONG RANGE FREIGHTING"**

*via* **Santa Fe**

*The Little Man  
Who's Always There!*

Santa Fe announces the placing in regular mainline freight service of its *third* Diesel freight locomotive. These fleet monsters keynote an era of even greater service to the shipper, an era of enhanced facilities and safe handling. Santa Fe is proud to be the first railroad to utilize the advantages of Diesel power in all classes of service.

#### Santa Fe Now Regularly Provides:

- *Sixth morning* delivery at Pacific Coast points from Chicago.
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- *Third morning* delivery, Chicago to Galveston, Houston, and Beaumont. (Carload and less carload merchandise.)
- *Second morning* delivery, Chicago to Oklahoma City.
- *The only overnight* freight service, Chicago to Kansas City.
- *Free pickup* and delivery service on less carload merchandise.

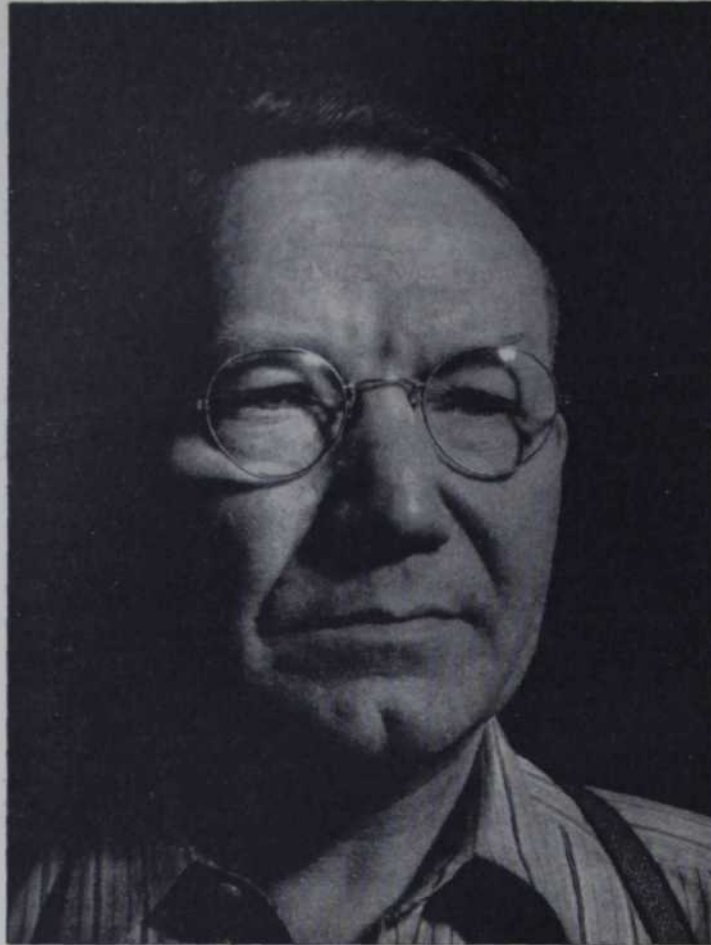


Call your nearest Santa Fe Freight Representative or write

**J. J. GROGAN**

**GENERAL FREIGHT TRAFFIC MANAGER  
CHICAGO, ILLINOIS**





# VETERAN

HE is independent and proud, yet democratic and friendly. He is the envy of the rest of the world, and its hope. He is generous and tolerant and peace-loving—and withal the most powerful man in the world. He is the American workman.

His hands, accustomed to the feel of wrench and lever and gauge, may never have held a gun; his mind, trained to think in terms of tolerances as fine as 1/10,000 of an inch, may never have wrestled with a problem of military strategy; and yet he is the veteran of a thousand campaigns.

His campaigns began in the laboratories, and his prowess was proved in the test pits of American industry. His battles were waged on the factory floor and in the field. His victories have helped to make the citizens of the United States the most fortunate people in the world, and the U.S. the greatest nation on earth.

In the plants of the General Electric Company, working with General Electric scientists and engineers, this man, the American workman, has made giant generators to light whole cities, X-ray tubes to penetrate the mysteries of human flesh and metal castings, radio and television apparatus to project man's voice and image through space over the mysterious waves of the ether.

Today, in the gravest hour of world history, he is engaged in the greatest campaign of all. But there is serenity and confidence in his face, and the experience of a thousand campaigns behind him. He is sure of his own abilities, certain of his country's future. General Electric Company, Schenectady, N. Y.

**GENERAL  ELECTRIC**

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## MOBILIZED *for Defense*

From Maine to Florida—from the Atlantic Coast through the great Middle West—Sealtest has mobilized a corps of food scientists, chemists and other laboratory workers.

These skilled technicians are enlisted *to safeguard the purity and high quality of dairy products*—those foods so vital to the health and well-being of our nation.

Dozens of Sealtest Laboratories are located at strategic centers. Scores of Sealtest “Men in White” are constantly testing, checking and supervising Sealtest Milk, Ice Cream and other dairy products.

This pooling of scientific research and knowledge into one great laboratory system brings to each community the benefits—not merely of a local laboratory—but of a nation-wide network of laboratories.

Yet Sealtest Supervision does not cost you a single penny. Look for the dairy company in your community that produces Sealtest Milk, Ice Cream and other dairy products, and let the Sealtest Symbol be your guide to purity and quality.

Tune in the Rudy Vallee—Sealtest Program,  
Thursdays at 10 P.M., e.d.s.t., NBC Red Network

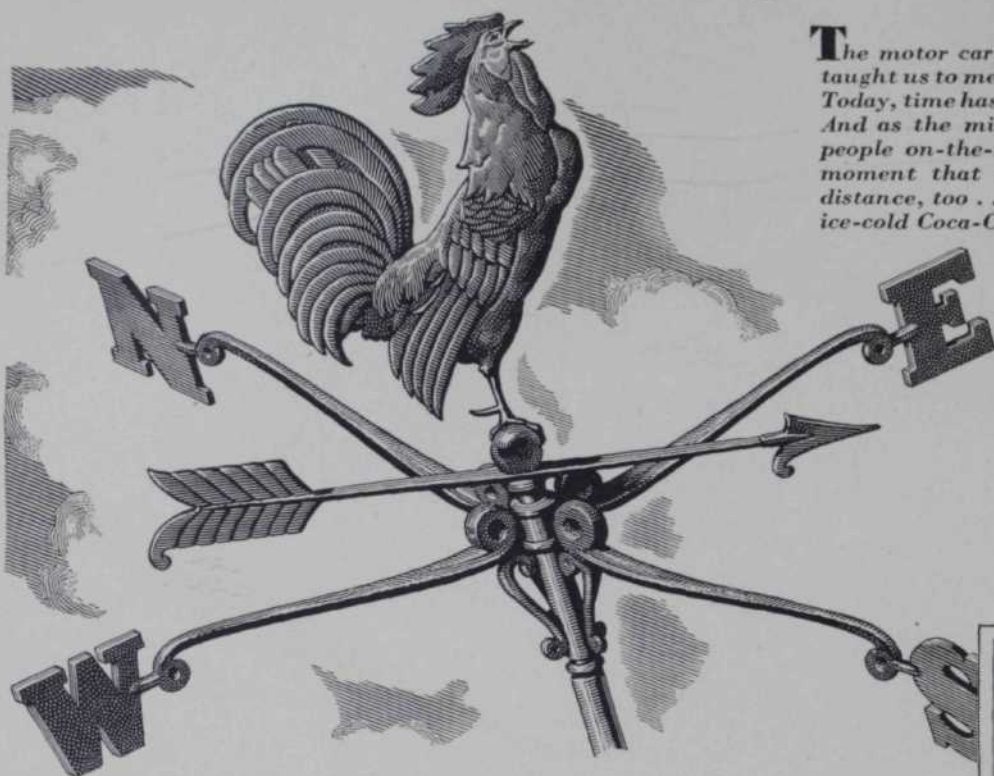


Sealtest, Inc. and its member-companies are subsidiaries of National Dairy Products Corporation.



# North...South...East...West...

## all roads lead to *the pause that refreshes*



The motor car, streamliner and airplane have taught us to measure miles in terms of minutes. Today, time has more significance than distance. And as the minute has grown in importance, people on-the-move have found another little moment that everywhere seemingly shortens distance, too . . . the pause that refreshes with ice-cold Coca-Cola.

A nation that has brought its horizons closer together with wings and wheels has discovered that today's fast pace needs frequent pauses. So, no matter where people go or how they go, ice-cold Coca-Cola goes along or greets them at stops along the way . . . to offer *the pause that refreshes*. Every day, millions welcome it.

Any custom that becomes an everyday matter in the lives of millions must have something *natural* about it. There's something very *natural* about pausing to still thirst with ice-cold Coca-Cola. There's something natural, too, in the expressions so often heard, such as "I want a 'Coca-Cola'" or "Give me a 'Coke,'

please." For ice-cold Coca-Cola is just naturally "delicious and refreshing." It is pure, wholesome and good.

Today, more than ever, a needed pause for refreshment takes on the significance of a pleasant essential to a people intensely at work . . . and *the pause that refreshes* with ice-cold Coca-Cola is doing that job everywhere, every day.



**THE FOUNTAIN GLASS FOR COCA-COLA.** The standard glass for Coca-Cola is used at soda fountains everywhere. It bears the frosted trade-mark "Coca-Cola." Another feature is the guaranteed beaded rim which makes it hard to chip, avoiding the possibility of sharp edges. Fountain operators, too, appreciate its reinforced bottom which greatly reduces the problem of breakage.

**Enjoy *The Pause that Refreshes* with ice-cold Coca-Cola**

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## BACKGROUND FOR BOMBARDMENT

*No sudden inspiration was the design of the U. S. Army's new Martin B-26 . . . with "striking power unequalled in a medium bomber" . . . "faster than many pursuit planes now fighting in Europe" . . . most heavily defended plane of its class . . . armed to pour gunfire in all directions . . . the world's "fightin'est" bomber.*

Back of the Martin B-26 lies the longest bombing experience in the annals of aviation—28 years long! In 1913, five years after he built his first airplane, Glenn L. Martin built America's first Military Training Plane, in it acted as bombardier in the U. S. Army's first bomb-dropping experiments. Five years later came

the earliest of the famous Martin Bombers, first twin-engine bomber in history, standard of the Army for a decade. Again, in 1932, the precedent-shattering Martin B-10 Bomber, 100 miles an hour faster than any other service bomber of its time, revolutionized aerial tactics, was awarded the coveted Collier Trophy. And these are but high spots of a bomber-building experience which also produced,

among other important types, the first air-cooled-engine bomber, the first dive bomber to carry a 1,000-pound bomb, great patrol bombers for the Navy, and the now famous Martin "Maryland" Bombers for Britain.

Now, out of the rich experience of the oldest and one of the largest aircraft manufacturers in the world, Martin B-26 Bombers are roaring from production lines in a swiftly mounting torrent of air power—joining the Army at a rate never before equalled in the production of large military aircraft. *America is meeting the challenge!*

THE GLENN L. MARTIN COMPANY, BALTIMORE, MD., U.S.A.

# Martin

## AIRCRAFT

Builders of Dependable Aircraft Since 1909



TRADE MARK



## WHIRLWIND ON WIRE!

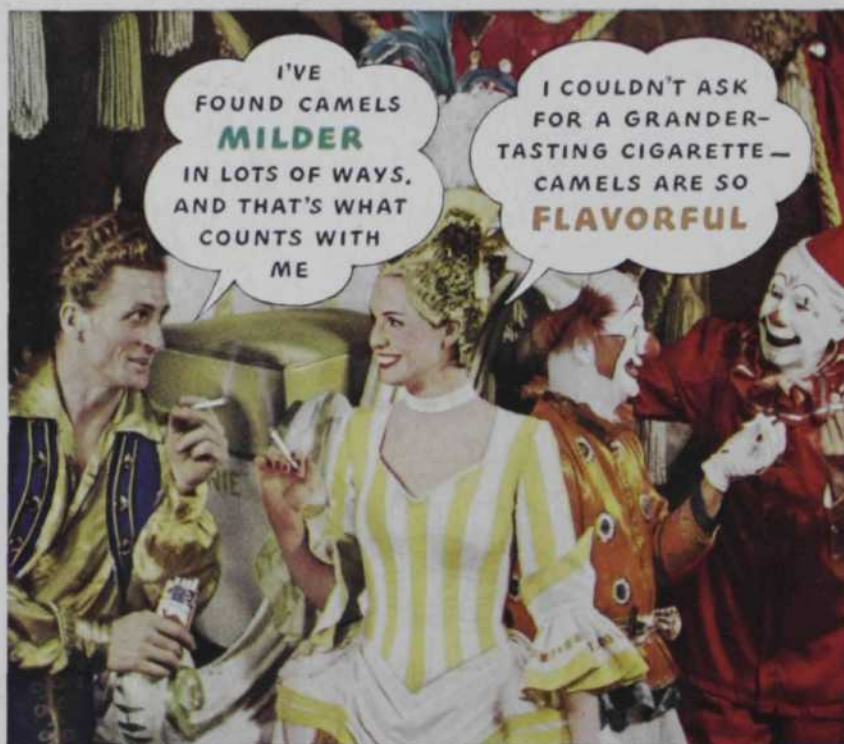


### HUBERT CASTLE

—Millions thrill to his aerial wizardry—share his preference for the extra-mild cigarette with less nicotine in the smoke—Camel

● A slim cable of steel—held at 3,500-pound tension by coil spring. The slightest miss can toss you like a bullet into plenty of trouble. And the wizard on this bounding wire (above) is Hubert Castle. His cigarette is the brand that gives the scientific assurance of less nicotine in the smoke.

● Hubert Castle worked 6 years—broke an arm, a leg, 3 ribs—to perfect the whirlwind series of somersaults and hoop jumps he performs on his bounding wire. But before you try any of his tricks, think it over...with a Camel. And remember: Camel's costlier tobaccos mean extra mildness.



I'VE  
FOUND CAMELS  
**MILDER**  
IN LOTS OF WAYS.  
AND THAT'S WHAT  
COUNTS WITH  
ME

I COULDN'T ASK  
FOR A GRANDER-  
TASTING CIGARETTE—  
CAMELS ARE SO  
**FLAVORFUL**

The *smoke* of slower-burning  
Camels contains

# 28% LESS NICOTINE

than the average of the 4 other  
largest-selling brands tested  
—less than any of them—  
according to independent  
scientific tests of *the smoke itself*

R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

"CASTLE IN THE AIR." That featured billing in the Ringling Brothers and Barnum & Bailey circus program means Hubert Castle, photographed with Mrs. Castle at Madison Square Garden, New York (above).

And to the Hubert Castles—to millions of other smokers just like yourself—Camels mean smoking pleasure at its flavorful best—with the extra mildness and extra freedom from nicotine that only Camel's matchlessly blended, costlier tobaccos can give.

But the proof of Camel's advantages is in the smoking...in the very *smoke itself* (see findings above, right). Try Camels. Discover what a difference Camels, with their slower-burning, costlier tobaccos, can make in your every smoking moment. For convenience—economy—buy your Camels by the carton.



BY BURNING 25%  
SLOWER than the average of the 4 other largest-selling brands tested—  
slower than any of them—  
Camels also give you a smoking *plus* equal, on the average, to

**5 EXTRA  
SMOKES  
PER PACK!**

**CAMEL THE CIGARETTE OF  
COSTLIER TOBACCOS**